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COVER FOCUS

Solutions To The Toughest IT Challenges

What are the toughest challenges your enterprise faces? We cover a few of the biggest and provide some expert insight on how to solve them.

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Increased Storage Demands

A Multistep Approach Can Help Enterprises Meet Needs

by George Crump

THE DEMAND for storage in today's data center continues to grow at a rapid pace, and IT professionals are expected to deliver the storage their users need even as budgets are tightening. Taking a multistep approach can help IT departments meet storage demands without breaking the bank.

Assess Your Situation

The first step is to know what you have. "As the need for storage capacity continues to mount, the need to understand and monitor the assets becomes more critical," says Ken Barth, CEO of Tek-Tools Software (www.tek-tools.com). "Often, companies may decide to do a one-time audit of their environments, but because of the increasingly dynamic nature of IT, what is really needed are real-time monitoring solutions that can present the state of the IT assets at that moment in time, as well as project into the future and perform trending," continues Barth.

Storage requests don't come in an orderly fashion; instead, they are often in response to sudden requests to deploy an application or to add additional storage. In these cases, there is no time available to stop everything

and perform an audit. Having real-time data of the storage assets is critical and allows for a more sane decision-making process. Also, with real-time monitoring, the consumption of storage and backup resources can be trended and storage purchases planned for within the budget cycle.

From this data, IT can build simulators that will show the effect of adding a new application to an existing storage system, which allows IT to place new workloads on the correct storage platforms for both optimal use of the storage and optimal application performance.

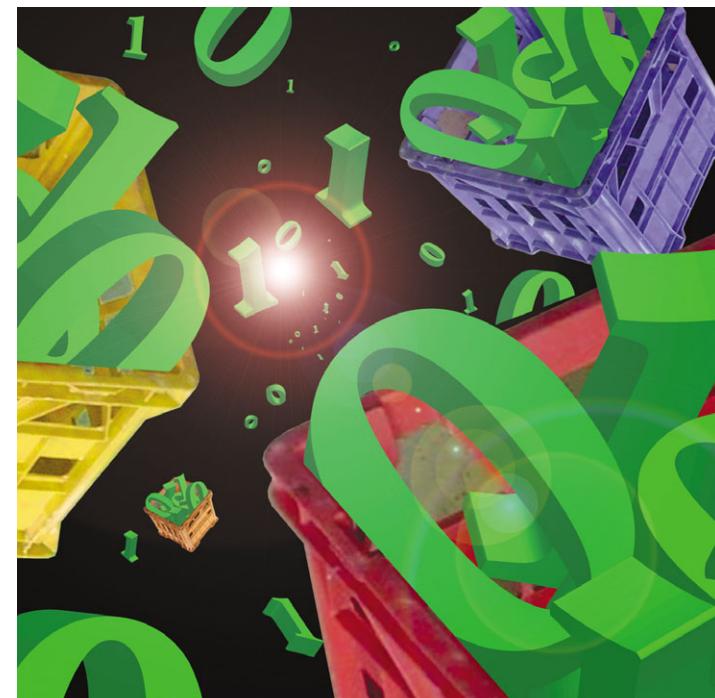
Save In The Long Run

IT should next explore storage systems that are able to drive down the costs associated with both the acquisition and the operation and maintenance of storage. "Moore's law will help out with the CAPEX, but the real question is how to deal with OPEX," says Rob Peglar, vice

president of technology with Xiotech (www.xiotech.com). "Storage manufacturers need to focus on driving down the operational expenses for users with easy-to-monitor, self-healing storage."

As storage grows, acquisition cost remains a factor, but it is not just the hard dollar cost that should be considered. Look for solutions that can start small (with a low initial investment) and expand easily to avoid over-allocation. Also, look for systems with a smaller physical footprint, saving data center floor space and potentially power and cooling as a result.

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Windows 7 Update

The Skinny On Microsoft's Forthcoming OS

by John Brandon

ABOUT A YEAR from now, Microsoft will release a brand new operating system that addresses many of the concerns that arose from Windows Vista. Windows 7 is said to have more in common with Windows 2000 and Windows XP, and its emphasis will be on stability, driver support, security, and meeting the needs of both consumers and the business market rather than on radical interface changes and extensive support for emerging technologies.

Refining Vista

According to Stephen Kleynhans, a Gartner research vice president, Windows 7 is a "polishing" of Windows Vista, but for IT managers in an SME, the benefit of this pol-

ish is not in new interface enhancements. Instead, managers can expect very few look and feel adjustments, which will aid in deployment strategies and training. Windows 7 will provide a new Taskbar with a more technical look that mimics the touchscreen approach that is becoming increasingly popular. New, larger icons will show larger thumbnail views and provide more flexibility in where you put them. New tricks for window transparency, "jump lists" that house commonly used apps, and a way to see apps in a split-screen mode are the main cosmetic enhancements. Microsoft also plans to add touch computing features, supporting touch browsing in Internet Explorer and zoom features similar to those of an iPhone.

Although these changes sound compelling, it's likely that IT managers will be more

impressed with how Microsoft plans to optimize the underlying code much like it did with Windows Server 2008, which is now more nimble and has fewer lines of code than its predecessors. The goal is to overcome the user perceptions about Vista—that it is hard to use, lacks extensive driver support, and is prone to crashes and bugs. Kleynhans says Microsoft plans to tweak and not overhaul Vista to make it more stable for enterprises and consumers. It will also address usability issues, especially with how end-user systems connect at home and at work.

"There will be improvements in home networking, which will help workers who bring home their work laptop[s] and are frequently stymied trying to get it to work properly on their home network[s]," says Kleynhans. "There are also changes to make reinstalling the OS on a system less disruptive and encryption security for USB keys and external drives."

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STORAGE

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Features include the ability to implement a large, tiered IP SAN storage system with support for up to 15TB with 1TB SATA drives, expandable up to 240TB. RAID controllers, power supplies, cooling modules, and disk drives are hot-swappable.

Despite the enterprise-level capabilities of the iQstor iQ2850, it's designed to be a low-cost and simple storage system, ideal for companies that need to consolidate multiple servers without the need for specialized host adapters, switches, and cables. Other benefits include integrated data protection features such as volume manager-based storage virtualization, snapshot, mirroring, remote replication, policy-based storage provisioning, capacity expansion, and remote support. Supported platforms include Microsoft Windows, VMware and Linux.

PHYSICAL INFRASTRUCTURE

DECEMBER 5, 2008



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The series of devices includes three models with rugged systems designed to work in severe conditions with no interruption. The units each have one 15-inch or three 17-inch high-resolution LCD displays and an open platform for better compatibility with equipment such as cameras and video management software.

The triple-screen systems support up to 3TB of storage. All JetX

systems feature a built-in high-resolution display, integrated keyboard and touchpad, and a rolling carrying bag.

The JetX M-Powered product features a battery-powered system designed to provide long-lasting power in off-road applications and is also available in hybrid editions. The hybrid editions support up to 32 analog and eight IP cameras. Single-display JetX systems feature 2TB of internal storage capacity and a dual-core Xeon processor.

DNF SECURITY
DYNAMIC NETWORK FACTORY

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SOURCES

NOVEMBER 28, 2008



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Librato Load Manager is a workload management solution that helps customers deliver predictable application performance and optimal system resource utilization for x86 platforms on physical or virtual servers. Load Manager guarantees server resource utilization independently across CPU, memory, storage I/O, and network I/O, which enables customers to run more applications on fewer servers without compromising business goals.

Load Manager allocates system resources via a policy-based scheduler to ensure optimal performance and service level. By maximizing server utilization and delivering application quality of service, Load Manager results in fewer servers, fewer operating systems, less complexity, and guaranteed service level agreements. By dynamically assigning unused capacity, Load Manager dramatically increases server utilization, enabling organizations to get the most out of existing

resources. Load Manager typically uses less than 1% overhead and requires no OS or application modifications.

Load Manager supports Linux and Windows Server 2003 and 2008. The solution's demand-monitoring capabilities provide an advanced level of capacity planning. In addition to allocating system resources to an application and measuring actual resource consumption (load) over time, Load Manager can also be used to project how much resource an application would have consumed (demand) had it not been limited by its allocation. This ability to determine the difference between load and demand provides organizations with a powerful tool for planning server capacity.



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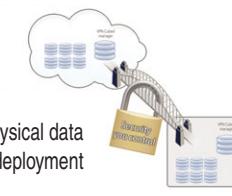
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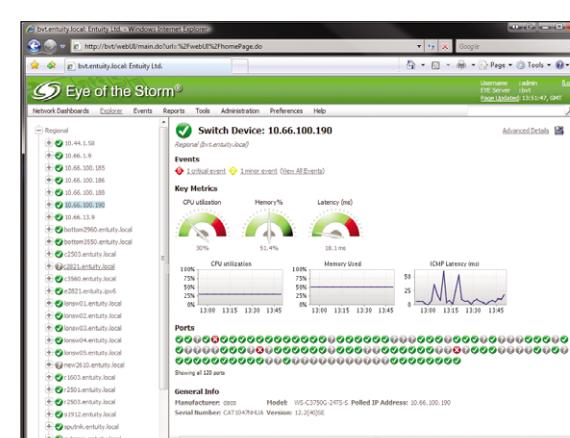
CohesiveFT offered a precursor to the VPN-Cubed offering in production for more than a year via the Open Source VcubeV® project. VPN-Cubed is available now as a packaged service. The basic service is available for use with most operating systems, virtual environments, and third-party cloud offerings. Implementations will vary based on a customer's unique topology.

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NETWORKING & VPN

NOVEMBER 28, 2008



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Dig Deep Into The Network Infrastructure
Entuity Eye Of The Storm 2009

Entuity's Eye of the Storm (EYE for short) provides IT administrators with detailed information about operational, performance, inventory, and connectivity data. In EYE 2009, Entuity has added multiple interface enhancements and other features that will help IT staff turn data into actionable knowledge. For example, EYE 2009 offers graphically descriptive and interactive Web components from a single, unified display, which helps IT staff improve management workflows and avoid network support issues that may appear with oversimplified management tools or complex framework applications.

One of key additions in EYE 2009 is improvements to event handling and presentation that allow workers to acknowledge, suppress, or age-out events. Administrators can easily account for known outages, such as a devices brought down for maintenance, to prevent unwarranted SLA impact.

EYE 2009 includes a Green IT Perspective that quantifies the IT infrastructure's contribution to green IT initiatives. The Green IT Perspective features an interactive dashboard that lets users monitor IT device power consumption; track server, workstation, and network device utilization; and observe the conformance of

devices to shutdown policy. EYE 2009 reports the dollar, kilowatt hour, or CO2 ton cost associated with (as well as potential savings from) network infrastructures.

With EYE 2009, Entuity introduced a new data API that helps improve EYE 2009's built-in Report Center. The new API allows for the creation of custom mashups and in-house applications from the data, and the business analysis is ideal to organize, produce, and utilize standard reports.



HP Shows Strong Q4 Revenue

Citing strong sales, HP announced a big jump in revenue for its fourth quarter. Revenue was up 19% compared to last year, rising from about \$28.3 billion in Q4 2007 to \$33.6 billion this year. Revenues for the year as a whole were up 13%, climbing to \$118.4 billion. Despite the increased revenue, however, HP saw its profits drop slightly for the quarter from about \$2.16 billion last year to about \$2.11 billion this year. Still, profits for the 2008 fiscal year were up 15% year over year; the company earned \$8.3 billion this year compared to \$7.3 billion in 2007.

Microsoft Ranks In Worst Spam Service ISP List

Spamhaus.org recently compiled a list of the Top 10 of the worst spam service ISPs. In the list, Microsoft ranked No. 5. Microsoft's Live.com and Livefilestore.com sites are heavily targeted by spammers because the spammers know Microsoft sites aren't blocked by antispam groups. Spamhaus has been calling the attention to Microsoft for some time, but to no avail, according to Richard Cox, Spamhaus' CIO. In a statement, Microsoft said, "We take protecting our customers' security and privacy seriously and are continually working to improve their experiences while making industry-leading progress to mitigate such attacks through both oversight and technology advancements."

Internet Explorer 8 Expected Next Year

Microsoft announced that one more public beta version of IE8 will be released in the first three months of next year, leading to speculation that



the final version will hit the market in mid-2009. Microsoft has declined to specify an exact release date for the final version. The last release candidate of IE7 was released about three months before the final release in October 2006.

Apple Faces Another iPhone Lawsuit

Apple is on the receiving end of a new lawsuit over the iPhone 3G. Avi Koschitzki, a resident of Long Island, filed the suit in the New York District Court, alleging that Apple shipped devices knowing they were defective. Koschitzki cites a faulty 3G connection as a defect and says the phone is not as quick as the ads portray. Apple has acknowledged the connection problem and released a firmware upgrade to resolve the issue earlier this year.

WATCH THE STOCKS

This information provides a quick glimpse of current and historical stock prices and trends for 14 major companies in the technology market.

Company	Symbol	Year Ago	Nov. 20 \$	Nov. 26 \$	% change from previous week
AMD	AMD	\$10.35	\$1.89	\$2.13	▲ 12.7%
Computer Associates	CA	\$24.92	\$14.63	\$16.08	▲ 9.91%
Cisco Systems	CSCO	\$28.05	\$14.47	\$16.39	▲ 13.27%
Dell	DELL	\$27.69	\$9.81	\$11.05	▲ 12.64%
Google	GOOG	\$692.26	\$259.56	\$292.09	▲ 12.53%
HP	HPQ	\$50.73	\$31.83	\$35.21	▲ 10.62%
IBM	IBM	\$107.37	\$71.74	\$81.67	▲ 13.84%
Intel	INTC	\$26.19	\$12.23	\$13.97	▲ 14.23%
McAfee	MFE	\$39.32	\$25.79	\$30.41	▲ 17.91%
Microsoft	MSFT	\$33.70	\$18.14	\$20.49	▲ 12.95%
Oracle	ORCL	\$20.51	\$15.40	\$16.14	▲ 4.81%
Red Hat Software	RHT	\$19.56	\$7.89	\$9.48	▲ 20.15%
Sun Microsystems	JAVA	\$20.86	\$3.09	\$3.11	▲ 0.65%
Symantec	SYMC	\$18.22	\$10.05	\$12.17	▲ 21.09%

NOTE: This information is meant for reference only and should not be used as a basis for buy/sell decisions.

Smartphone Use Expected To Double

J. Gold Associates recently announced the results of its "Enterprise Mobile Applications: A Study of Strategies and Adoption Trends" report, which predicts that the use of corporate smartphones will double over the next three years. The firm asked more than 340 enterprises in North America and Western Europe about their mobile technology adoption and found that the number of smartphones will grow about 30% over the next year and double over the next three years. The report also predicts the use of business smartphone apps will grow 196% over the next three years. It appears as though smartphones are replacing notebooks; the study sees no increase in the number of laptops the enterprises surveyed expect to deploy over the next year and only 25% growth over three years.

Cybercrime Booming

Symantec's latest report on the underground cybercrime economy reveals that about \$276 million of cybercrime goods and services were advertised online between July 1, 2007, and June 30, 2008. The report, which tracked 44,752 unique samples of sensitive information posted by 69,130 unique advertisers on underground economy servers, also shows that the estimated value of credit card and bank account information currently for sale could be worth \$7 billion. Most of the illicit services were hosted in the United States (41%), but Romania ranked No. 2 with 13%. At the time of the study, botnets were available for an average price of \$225, hosting for phishing services averaged \$10, keystroke loggers averaged \$23, and vulnerabilities sold for \$740.

Vista Flaw Discovered

Researchers have discovered a substantial security vulnerability that could allow hackers to hide rootkits or execute denial-of-service attacks from a computer's OS. The vulnerability was brought to Microsoft's attention by Thomas Unterleitner, who works for Austrian security company Phion. Unterleitner says the issue is in the network input/output subsystem of Vista. Certain requests sent to the Iphlpapi.dll API could cause a buffer overflow that corrupts Vista's kernel memory and result in a computer crash. Microsoft says it is not aware of any attacks similar to the one Unterleitner suggests and could not confirm whether a new Service Pack will include a solution.

PC Shipments To Grow At Slower Pace

A recent forecast from analyst firm iSuppli calls for global PC shipments to grow by 4.3% in 2009. The projection, however, is a readjustment from a previous prediction of an 11.9% gain for the year. iSuppli cites the economy as

the reason for the new forecast. "Since iSuppli published its last worldwide PC forecast, the landscape of the global economy has changed dramatically, and, in many ways, irrevocably," says Matthew Wilkins, an iSuppli analyst. "The result of the financial turmoil is less money to spend. With less money to spend, application markets, such as PCs, have been impacted." iSuppli also readjusted its 2010 PC forecast, changing its original 9.4% growth prediction to 7.1%. Although iSuppli predicts desktop shipments will sink by 5% for 2009, it predicts notebook shipments will climb by about 15% fueled primarily by netbook sales. On the semiconductor front, iSuppli readjusted an October projection of 3% global revenue growth this year to a decline of 2% to \$266.6 billion, compared to \$272 billion in 2007.

Palm Reportedly To Cut 10% Of Workforce

With RIM's BlackBerry devices and Apple's iPhone carving out an ever-deeper swath in the smartphone market, a Palm spokesperson recently confirmed it was forced to lay off employees. Although the company wouldn't confirm the exact number of employee layoffs, various reports put the cuts at up to 10% of Palm's 1,050 employees. "There have been some layoffs as a result of challenges facing our company and the industry, and we're restructuring our worldwide operations to better position ourselves for profitability and long-term growth," says Lynn Fox, Palm spokeswoman. Palm still plans to release its new Linux-based OS this year to replace the aged Palm OS. The company also plans to release products using the OS in the first half of next year.

Online Advertising Growth Slows

According to reports from the IAB (Interactive Advertising Bureau), quarter-to-quarter comparisons reveal a drop in online advertising revenue between last year's fourth quarter and this year's first quarter. This is bad news for Internet companies such as Google, Yahoo!, MySpace, and Facebook, which run display ads, banner ads, video ads, flash-based ads, and search ads. However, online advertising has been growing at a steady but slow pace during the rest of this year. In the third quarter, advertising sales reached \$5.9 billion—an 11% increase from 2007's third quarter final numbers. Spending for the first nine months of this year reached \$17.3 billion, compared to \$15.2 billion a year ago.

Dell's Earnings Lag

2008 profits for the international PC manufacturer Dell have dropped as much as 5% based on third quarter profit reports. As companies around the globe continue to purchase fewer



computers, Dell made \$727 million during the quarter in contrast to \$766 million a year ago. Earnings per share were 37 cents, up 9%. Even so, sales dipped 3% to about \$15 billion, which was just short of the \$16.2 billion predicted by analysts. In response to the declining profits, Dell announced changes, including lowering employment numbers, cutting manufacturing costs, and gearing up for a software push.

Upcoming IT Events

Are you looking to learn more about data center or IT topics? Network with some of your peers? Consider joining a group of data center professionals. If you don't see a meeting listed in your area, visit www.afcom.com, www.aitp.org, or www.issa.org to find a chapter near you.

DECEMBER

ISSA Central Plains

Dec. 5, 1 p.m.

SKT Business Communications Solutions
3rd Floor
125 N. Emporia, Suite 100
Wichita, Kan.
www.issa-cp.org

• • • •

Computer Measurement Group '08

Dec. 7-12

Las Vegas, Nev.
www.cmg.org/conference

• • • •

AFCOM Omaha

Dec. 10

Mutual Of Omaha
Omaha, Neb.
www.afcomomaha.org

• • • •

ITEC Portland

Dec. 10-11

Portland, Ore.
www.goitec.com

• • • •

AITP Nashville

Dec. 11, 5:30 p.m.

Holiday Inn-Brentwood
760 Old Hickory Road
Brentwood, Tenn.
www.aitpnashville.org

• • • •

AITP Washington, D.C.

Dec. 11, 6:30 p.m.

Alfio's Restaurant
4515 Willard Ave
Chevy Chase, Md.
aitpwashdc.ning.com

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ISSA Baltimore

Dec. 17, 4:30 p.m.

Sparta Inc.
7110 Samuel Morse Drive, Suite 200
Columbia, Md.
www.issa-balt.org

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ISSA Fort Worth

Dec. 17, 11:30 a.m.

The City of Fort Worth Building
275 W. 13th Street
Fort Worth, Texas
www.issa-cowtown.org

• • • •

AITP Omaha

Dec. 18, 5:30 p.m.

Seraph Corp.
Omaha, Neb.
www.aitpomaha.org

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JANUARY

AITP Omaha

Jan. 15, 5:30 p.m.

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FEBRUARY

AFCOM St. Louis Gateway

Feb. 9

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Feb. 19, 5:30 p.m.

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www.aitpomaha.org

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AITP Omaha

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AITP Omaha

April 16, 5:30 p.m.

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Secure Remote Access

Positive Networks' PhoneFactor Offers Safe Authentication & Fraud Protection

by Robyn Weisman

THE AMERICAN FOUNDATION for the Blind recently commenced a pilot telecommuting program for about a third of its 120 employees. However, because the AFB has many blind employees, typical VPN authentication methods that rely on visual passwords just weren't feasible, explains Kelly Bleach, the AFB's chief IT officer.

Additionally, the organization found that simple password authentication wasn't secure enough for its needs. "It's easy for people to get passwords or find other people's passwords," says Bleach. "For anyone to access our network remotely, we wanted them to have a physical device [as well as] a password because a physical device makes it harder to get in unless you are really the authorized person."

Fortunately, Bleach found PhoneFactor by Positive Networks (www.positivenetworks.com), which provides Bleach's employees with two-factor authentication that her blind employees can also use. "It's a matter of answering the phone and pressing the # key. It really solved everything," Bleach says.

Positive Networks PhoneFactor

An easy-to-use VPN, corporate, or Web site login solution that uses a two-step authentication process. Once the user enters his or her name and password, PhoneFactor calls either the user's cell or landline phone for a confirmation. PhoneFactor does not require special tokens for the user to carry or software to install.

"We've looked at a lot of different solutions for authenticating to a VPN for remote access, and I think PhoneFactor was pretty unique and creative. I've never seen anything like this [with] being able to use your existing cell or landline phone, and so I just give them kudos for that creative thinking," says Kelly Bleach, chief IT officer at the American Foundation for the Blind (www.afb.org).

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A Happy Accident

The AFB (www.afb.org) had been using another authentication product for its network. However, the makers of that product changed it to work only with a single operating system. "As we started moving towards having a multitude of operating systems, [the company] required associated software [and a USB token] to be installed on the computer that was being used, and when people started using Vista computers, it wasn't compatible anymore," Bleach says.

According to Bleach, the AFB's IT department discovered PhoneFactor by accident. "We were at Interop at [New York's] Javits Center, just browsing the booths, when we saw PhoneFactor there," says Bleach. PhoneFactor seemed to be the authentication solution the AFB needed, so Bleach decided to test out the basic network services provided with PhoneFactor's free version. And it worked.

Bleach says PhoneFactor's price was reasonable for the service it provided, and Positive Networks took the AFB's non-profit status into account when determining a price. The AFB has now gone from using only the free version of PhoneFactor to using Positive Networks' entire VPN suite.

Easy Implementation Made Easier

Bleach says the AFB's deployment of PhoneFactor went well. "My network engineer worked with someone on their staff, and they were willing to put in as much time as we needed to get it going [and] did phone training with him," she says, adding that PhoneFactor offered excellent customer service even when the AFB was using the free version of the product.

The AFB's network engineering department quickly figured out how to implement PhoneFactor in part because PhoneFactor uses an accessible Web-based administrative console. "One of our network administrators is blind and uses a screen reader, and she is able to set up accounts and make changes to accounts fine on her own using her screen reader," says Bleach. "We were really pleased because a lot of times, we get administrative applications on the network that don't work for a blind administrator, and [PhoneFactor] does," she says.

The organization has been so pleased with the support PhoneFactor and Positive

Networks as a whole has offered that the organization purchased a technical support plan so that if any of its users have a problem with PhoneFactor, they can call Positive Networks for help. "I've gotten good feedback. We had a meeting recently of our telecommuters, and the people who had used it were pleased with it," says Bleach.

Making Telecommuting Easy

Using PhoneFactor is a snap for the AFB's telecommuters. These employees enter the same username and password they use in the office, and PhoneFactor rings their phones to confirm the password authentication and allow them remote access into the office network.

In addition, PhoneFactor can be set so it will check telecommuters' remote computers for antivirus and Windows updates, main-



taining a secure network environment by preventing anyone who does not have the latest versions of Windows or antivirus programs on their home PCs or laptops from logging on until the updates have been installed.

"We've looked at a lot of different solutions for authenticating to a VPN for remote access, and I think PhoneFactor was pretty unique and creative. I've never seen anything like this [with] being able to use your existing cell phone, and so I just give them kudos for that creative thinking," says Bleach.

Full Suite Ahead

After its success with PhoneFactor, the AFB migrated to Positive Networks' VPN suite because it offers the same ease of use and inventive features that PhoneFactor does. As administrators, Bleach's group can set up what files and services its remote users can access. "Their Positive Networks account will map their drives, can change what their desktop looks like, and can add folders to their Internet Favorites that

More Than A Token

When Positive Networks set out to develop PhoneFactor, the company did not realize the practical implications for people with disabilities, says Sarah Fender, vice president of marketing and product management at Positive Networks (www.positivenetworks.com). "The phone is an inherently compatible device and something that people with disabilities can use," she says.

But according to Fender, PhoneFactor was designed to eliminate the use of tokens for authentication purposes. "Just the fact that you have to carry around this device, and you lose them [or] they break [and] get out-of-sync, both from a user perspective and a corporate IT department perspective, [tokens are] a pain," Fender says.

Although most commonly used as a two-factor authentication of corporate VPNs, PhoneFactor also aids organizations in securing Web sites, credit card transactions, and other online applications in which security is required. The company supplies Web plug-ins to help organizations effectively deploy it for use with their business partners and customers, as well as for its employees.

PhoneFactor also gives end users and IT departments the ability to get real-time fraud alerts. "Unlike a token or some other device, if someone knows your username and password and tries to log in, PhoneFactor will call you," says Fender. "You can press '5#' to generate a fraud alert that will lock your account and instantly notify your IT department, [which] can do research and figure out in real time the IP address that the attack is coming from."

would point to things within our network," Bleach says.

One of Bleach's favorite features is the ability to add Favorites and shortcuts to Internet Explorer, so if a conference call or something similar needs to be set up, employees can access the link through the favorites and shortcuts rather than having to remember a long URL. "Automatically, a link shows up in their IE Favorites, so all they have to do is click on that, and they are then rerouted to our conference server," Bleach says. □

"It's a matter of answering the phone and pressing the # key. It really solved everything."

- American Foundation for the Blind's Kelly Bleach

SECURITY

NOVEMBER 28, 2008



eEye Retina OnDemand is a SaaS security vulnerability management package offering rapid deployment of Retina Security Management appliances.

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Security Vulnerability Management

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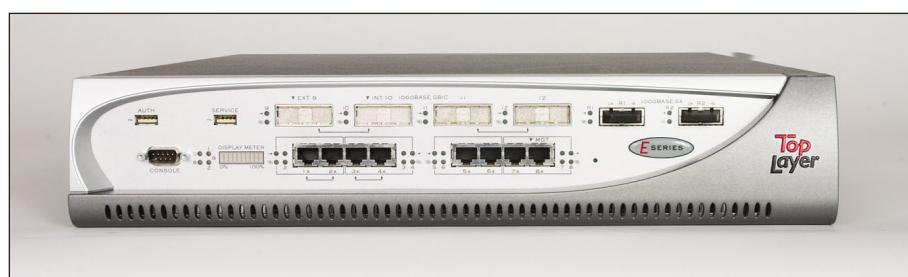
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SECURITY

NOVEMBER 28, 2008



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The IPS 5500 E-Series also includes a new user interface with dashboards designed to allow Security Operation Center personnel to

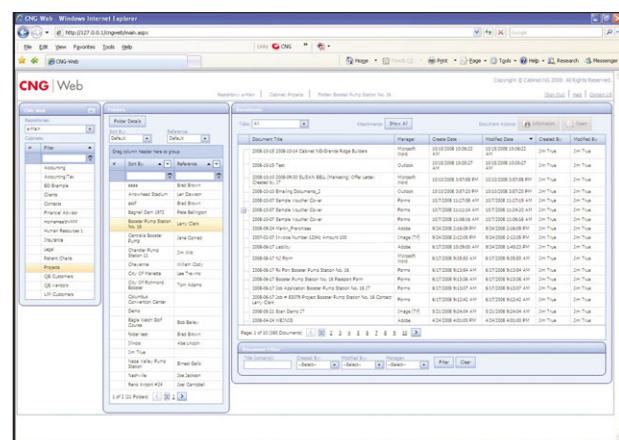
quickly switch between "quiet-time" monitoring and "under siege" incident response. Other new features include attack source identification, malicious IP address shunning, and additional router protection.

With malicious IP address shunning, users can set time periods for how long each address should be shunned and manually unshun addresses that are determined safe. With additional router protection, users can export a list of IP addresses being shunned so that they can be imported into a router for blocking by the router. The new features are included in version 5.2 of the IPS 5500 E-Series software.



CLIENTS

NOVEMBER 21, 2008



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PHYSICAL INFRASTRUCTURE

NOVEMBER 21, 2008

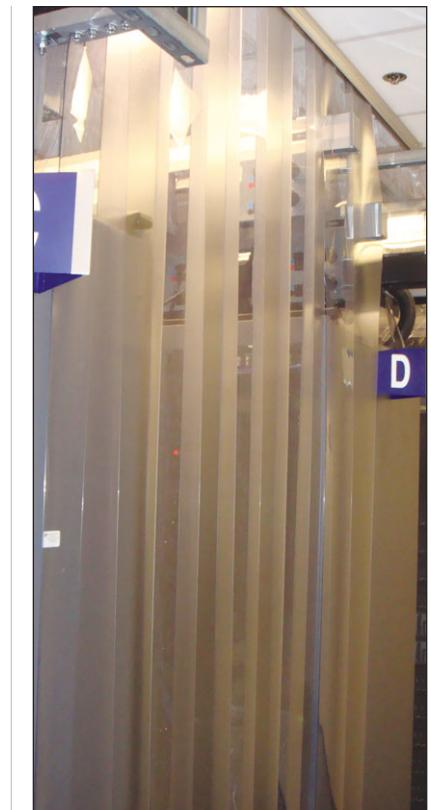
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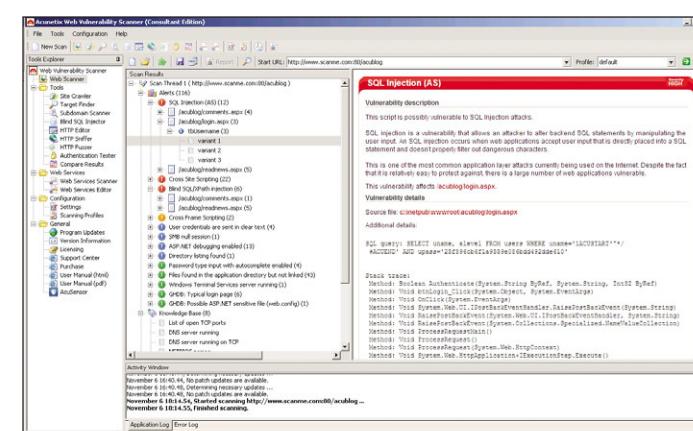
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SECURITY

NOVEMBER 21, 2008

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Acunetix Web Vulnerability Scanner v6.0 performs automated scans and displays vulnerabilities found.

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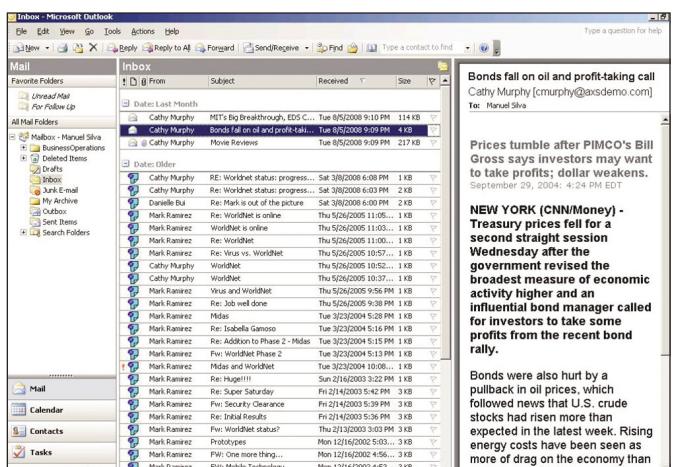
technology that allows developers to identify more vulnerabilities than with a traditional Web Application Scanner, while generating fewer false positives. In addition, it indicates exactly where the vulnerability is within the code and reports debug information. It also locates CRLF injection, code execution, directory traversal, file inclusion, and authentication vulnerabilities.

Acunetix Web Vulnerability Scanner is available in three versions: A Small Business version for one nominated Web site; an Enterprise version to allow for scanning of an unlimited number of Web sites; and a Consultant version, which allows users to perform penetration tests for third parties.



MESSAGING & TELEPHONY

NOVEMBER 21, 2008



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Email & Data Migration Get A Shot In The Arm

AXS-One Dynamic Data Migrator

Data migration from one email platform to another can be an unwieldy process, requiring a great deal of planning and preparation, not to mention an abundance of resources. For example, different platforms allow different inbox sizes, creating a potential nightmare for employees who want to retain all their old emails after conversion and migration is complete.

AXS-One's Dynamic Data Migrator application offers a policy-based method of migration designed to solve this problem. Dynamic Data Migrator lets users retain their recent emails after migration, but it also creates a way for people to retrieve older emails instantly without requiring administrators to keep them all on local servers.

This helps relieve pressure on IT departments to create and maintain additional storage after

the migration. Emails that are more than two years old are available to users via a Web-based portal. Overall, Dynamic Data Migrator helps users maintain access to information necessary for doing business.

AXS-One has added new features to Dynamic Data Migrator: the company partnered with CASAHL and Unify to offer a best-of-breed approach to migrating calendars, contacts, and applications in addition to email. The partnership is also designed to provide effective co-existence with Lotus environments. The new enhancements will be available in Q1 2009.



STORAGE

NOVEMBER 21, 2008

Enhanced Backup Options For SMEs

Yosemite Backup 8.7

No company doubts the importance of backing up data. It's a crucial aspect of ensuring that a company's data is kept safe. Yosemite Technologies' Yosemite Backup application has been offering a backup solution for companies since the early 1990s.

Yosemite Backup is designed to be simple to purchase and upgrade and supports a range of platforms, including the latest Windows OSes, NetWare, and Linux. Another mainstay feature is the ability for companies to purchase a single backup server to

facilitate their backup needs instead of needing to acquire several.

The latest version of the application, Yosemite Backup 8.7, includes support for Windows Hyper-V and VMware ESX. It also supports Windows PE 2.1 for Vista and Windows Server 2008 disaster recovery.

Yosemite Backup 8.7 is designed to enable current customers to seamlessly update their environments while allowing new customers to easily add the applica-

tion. Users can implement push technology to update their Master Backup Server while automatically having updates installed on all deployed backup clients. Also included is support for SAN and shared devices, as well as Windows services, including Microsoft DFS, Active Directory Lightweight Directory Services, SharePoint 3.0 SP1, and Exchange 2007 SP1.

The Yosemite Backup software development kit version 1.0, which provides access to the API on which Yosemite Backup is based, is available on approval.

Yosemite Technologies Backup 8.7 allows companies to purchase a single backup server to facilitate all their backup needs.

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Staying Connected

Managing Branch Offices Is Easier Than Ever, But There Are Still Issues To Overcome

by Elizabeth Millard

THANKS TO A DECADE of problem-solving efforts when it comes to connecting far-flung offices and teleworkers, many of the major issues surrounding remote office connections have been ironed out. But some challenges do remain, including establishing a baseline of efficiency, standardizing equipment, offering tech support, and managing employees.

Setup & Management

Developing a strategy for a remote office's connection usually involves standardizing applications and equipment so they're the same as the main office. This cuts down on the number of vendors in the mix and increases the chances that vendors can help with initial setup and ongoing maintenance.

When setting up a remote office, one important consideration is to establish a definition of efficiency so that any gains can be tracked, notes Peter Doggart, director of product marketing at Crossbeam Systems (www.crossbeamsystems.com), which provides a platform that facilitates the consolidation, virtualization, and simplification of security services delivery.

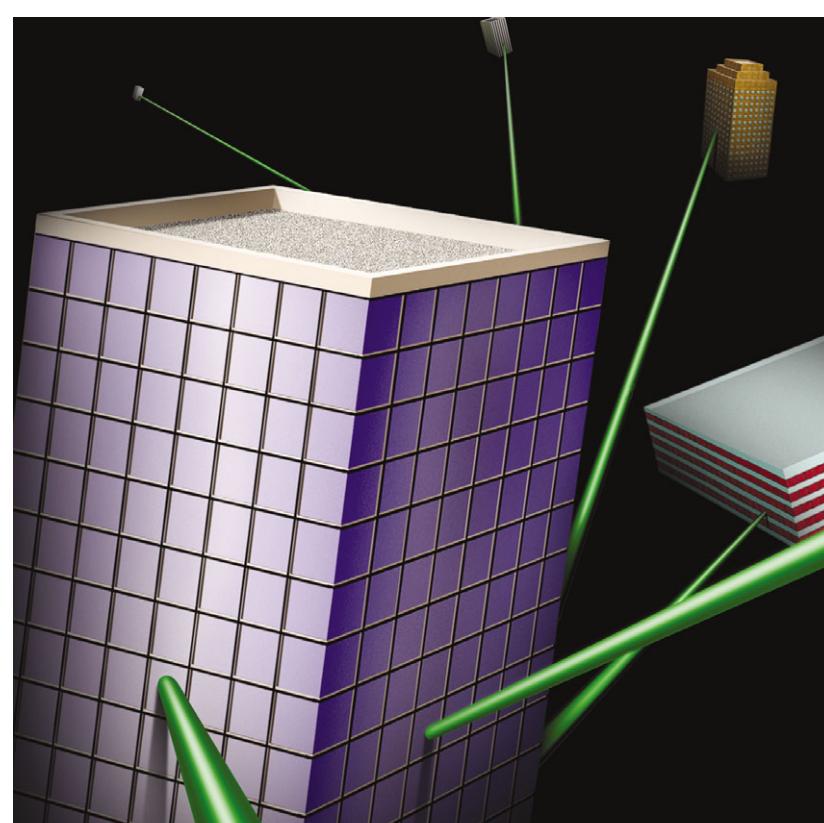
"As a term, 'efficiency' can be somewhat ambiguous, so IT has to be able to look at what that means, because once they have that definition in place, they can determine whether a remote office is as efficient as it could be," he says.

Once efficiency baselines are established and vendors have been recruited to help with technical implementation, an SME will have to develop effective management strategies, notes Scott Morrison, analyst at Gartner Research. Often, these tactics will be different than what's employed at a main office, because there isn't the type of direct oversight that's possible at a headquarters.

"You need to be able to trust employees in terms of following policies and using technology appropriately," he says. "But they have to be able to trust you, as well—that you'll be doing monitoring without being overbearing."

Tech Support

A major part of providing a strong connection among different offices comes in



helpful if a remote office is in another time zone or has a number of telecommuters that work at nontraditional hours. The firms are also sensitive to data security issues associated with remote offices and

Remote offices should get more care and feeding when it comes to network preventive maintenance because there's probably not an IT person on staff in that office.

can, for example, take control of a PC remotely without being able to access any corporate data as long as proper access controls are employed.

Because these firms are becoming more prevalent, competition keeps rates reasonable, and a data center manager can always try out a firm for a specified time period,

differently and doesn't have the same rate of hardware refreshes or application upgrades as the main office. Seeing the organization as a whole, rather than as separate components, can alleviate feelings of isolation in remote workers and create a more comprehensive, coherent IT strategy.

"Every situation is unique," says Gartner Research analyst Scott Morrison. "But any disparities in the way that offices are supported, both in terms of equipment upgrades and employee training, will be felt by those in a remote office."

Top Challenge: Creating Integration Strategies

Having a remote office brings up a number of challenges, such as tech support and upgrades, and one of the most crucial aspects in keeping it running is making sure that employees in the headquarters have real-time access to employees in other offices.

That means that instead of firefighting on separate issues such as hardware repair, storage tweaks, and bandwidth increases, IT needs to see the remote office as part of its overall strategy and include it in purchasing, support, and hiring decisions. Often, a remote office is treated

Key Points

- Coordinate with vendors to streamline setup and maintenance schedules
- Develop a management strategy that is supportive but not intrusive.
- Create support schedules that include in-person visits from an IT department member or a consultant local to the office.
- See the remote office as part of the organizational whole rather than as a subset with its own unique needs and schedules.

such as three months, to see if the ROI makes sense.

"For many remote offices, sending an IT employee from the main office can be cost-prohibitive because it means travel time, as well as lost productivity at the main location," says Fred King, vice president of sales and marketing at remote tech support firm PlumChoice (www.plumchoice.com).

In choosing a firm, it's often helpful to find one that has technicians that can physically visit the office, advises Chip Reaves of tech support provider Computer Troubleshooters (www.comptroub.com). Remote support consultants can do a great deal virtually, but if a network connection goes down, there isn't much they do unless they're looking at the machines to determine the problem.

Preventive Care

Also vital is to perform the same kind of regular checks that happen at the main office, including power and cooling assessments, bandwidth optimization changes, log reports, link utilization checks, and

Quantum Computing Takes Step Forward

Quantum computing, the interaction and behavior of matter on the atomic and subatomic levels, took a step forward recently with a paper that details new data-storing research. Researchers have reportedly found a way to preserve data-storing electrons longer, and the longer-lasting electrons allow a system to process data more consistently and run applications more effectively than traditional computing options. To gather the data, the researchers used magnetic states of electrons to store data, which helps avoid the quantum noise that can occur when the quantum bits spin. According to the research, the electrons had 5,000% longer life than similar data experiments.

Global Semiconductor Forecasts Lowered

IT industry group World Semiconductor Trade Statistics has dramatically lowered its predictions for the global semiconductor market over the next two years. In May, the group predicted that the market would grow 4.7%; however, economic weakness has led the group to lower that figure to a 2.5% increase to \$261.9 billion. As for next year, the group predicts that the semiconductor market will drop 2.2% year over year to \$256 billion. It's not all bad news, though; the group predicts that in 2010, the semiconductor market will rebound as demand for electronics bounces back, possibly growing 6.5% to \$273 billion.

Ballmer Ordered To Testify

Microsoft CEO Steve Ballmer will be required to give testimony in the so-called "Vista Capable" lawsuit against his company. District Court Judge Marsha Pechman in Seattle ordered Ballmer to submit to a three-hour deposition within 30 days. Microsoft had sought to keep Ballmer away from the case, which alleges that many computers marketed as "Vista Capable" since 2006 cannot, in fact, satisfactorily run all features of the more advanced editions of the OS. Judge Pech-

man ordered the deposition after plaintiffs submitted emails between Ballmer and Intel CEO Paul Otellini regarding possible changes to the marketing campaign.

Study: Young Workers Flout IT Policy

The so-called Millennial Generation (aged 14 to 27) thinks little of its employers' IT security policies if they get in the way of doing a job, according to a survey. An Accenture survey shows that at least 20% think that the equipment provided by employers is inadequate. About 75% of respondents say they've used online collaboration tools, 39% say they use personal cell phones to do work-related activities, 28% use social networking sites, 27% use IM, 19% turn to open-source products, and 12% regularly use online applications. About 71% say they've resorted to using those online applications from free Web sites because programs were not available from their employer.

Nvidia Designs Supercomputer Using Tesla Processor

Nvidia has announced designs for the Personal Supercomputer, a high-performance workstation that would use Tesla graphics processors for research in the scientific, oil and gas, and medical fields. The new design can utilize up to four Tesla C1060 GPUs for a total of 240 processing cores. The C1060 GPUs offer speeds of 1 teraflop and 4GB of memory, making them 10 times faster than a system with two quad-core CPUs but still using the same amount of energy.

Increased Storage Demands

Continued from Page 1

From the OPEX perspective, Peglar advises using virtualized storage solutions, which are significantly easier to manage and work well in virtualized server environments. They also have a dynamic nature that enables storage to be added as needed.

Companies should also look for solutions that have the ability to self-heal or recover from failure, because even if the drives that fail are under warranty and have no hard cost to replace, there is never a convenient time for failures and it is always disruptive. Drive repairs or replacements cost time that an IT professional does not have. However, systems that are built to reduce vibration

and heat and have specific software built in to try to recover failed drives can save IT significant time.

Lock It Down

The third step in dealing with increased storage demands in the enterprise is locking down the data. Tony Cerqueira, president of Cofio Software (www.cofio.com), believes that as the demands for storage increase, so does the temptation for users to "solve it themselves" by buying external USB storage to transport data from home to work. He adds that they may also use the corporate storage of assets to store personal information.

Top Challenge: Aligning Compliance & Capacity

Keeping pace with storage growth are the legal requirements surrounding data retention and compliance, which are easy to ignore until your organization is caught in violation. "The key is to be in compliance from day one," says Tony Cerqueira, president of Cofio Software (www.cofio.com). "Software needs to evolve to the point that the data can be super-

vised from creation [to] modification to deletion and finally to legal deletion."

Compliance should be an automated, continuous function, not a sporadic event. Trying to manage data and then apply compliance as an afterthought requires too much manual effort and is rife with human error. "Storage administrators simply get too

busy with other priorities and then a compliance problem just sneaks up on them," says Cerqueira.

Compliance should also involve a separate storage platform with specific retention capabilities such as WORM and encryption built in.

"The best way to win this battle is [to] fight the problem from the beginning and eliminate the problem at the moment data is created. Our advice is to invest in tools that manage storage actively," says Cerqueira.

One basic tenet of active storage management is to use blocking to make sure data that does not belong on fileservers does not get there. For example, a user's MP3 collection does not belong on corporate file servers. In addition, there is the need to assure that even authenticated users do not copy corporate assets. Authenticated users have the ability to copy data to USB hard drives or email data as attachments to personal email accounts or to competitors. Blocking tools make sure that only corporate data is stored on fileservers and that it stays on those fileservers.

Back It Up

As storage demands increase, so does the strain on the backup window and the backup infrastructure. Rich Pilkington, manager of market research at Syncsort (www.syncsort.com), believes that while most data centers will find budget dollars to keep pace with storage capacity demands, they will not have the budget to make sure that the backup infrastructure keeps pace, as well. Says Pilkington, "The cost to upgrade the existing SAN or network backup infrastructure to keep pace with the growth of storage and to meet

- First assess what you already have
- Make sure additional investments help keep CAPEX and OPEX under control
- Protect storage assets from theft, misuse, and system failure

current or even tightening SLAs (service-level agreements) may result in an ROI that is never met."

Pilkington believes that the way to address this problem is at its source by using source-side data reduction technology such as block-level incremental backups to reduce the amount of network traffic. Using this type of technology can significantly reduce load on the backup infrastructure.

Another often-overlooked impact of storage growth on the backup process is the time it takes to recover data. When a server fails, even if everything else in the recovery process goes perfectly, the sheer act of moving all of that server's data back across the network can be very time consuming. "A result of using this type of backup technology is that the backup disk destination becomes an active and usable target," says Pilkington. With an active target you can recover in place, meaning that the backup data can be iSCSI-mounted and be ready for the application to begin using without having to transfer the data back across the network. □

Windows 7 Update

Continued from Page 1

Deployment Strategies

It's never easy for data center managers to keep pace with technology advancements, but Microsoft plans to ease the transition to Windows 7, even hinting that companies could leap-frog the Vista release—which

Additional Windows 7 Features

Windows 7 offers more new features than just a smoother transition and a polished interface. Here are a few to look forward to.

- Device Stage allows easier, more visual management of mobile devices
- More integrated sync with Microsoft Web portals, such as Windows Live
- Internet Explorer 8 comes bundled
- Network search functions through a "one box" approach
- BitLocker To Go protects external hard drives and USB key drives

was a major upgrade with an extensive feature set—and wait for Windows 7, which may be released sooner than you think.

"Microsoft has stated that Win7 will ship roughly three years after the release of Vista, which would imply a release to manufacturing of the final code around the end of November 2009—about a year from now," says Kleynhans. "This would make it broadly available sometime in January or February of 2010, too late for Christmas sales. However, we suspect Microsoft's internal targets are significantly more aggressive and wouldn't be surprised to see it released in time to get onto Christmas machines."

Kleynhans speculates that the promised easier transition might follow Vista service pack deployment progression, but at a faster rate. Additionally, Windows 7 will have all of the core driver support of Vista with minor interface enhancements, so it will likely run more reliably than Vista.

Kleynhans says the key decision will be whether to wait for Windows 7 or to deploy Vista. Waiting for Win7 means sticking with Windows XP even as the support period is waning. "Windows XP leaves extended support in April 2014—that's a hard and fast

date," says Kleynhans. "Most organizations do not want to be running an unsupported OS. Third-party support for XP will start to dwindle through 2012 and 2013, making new machines difficult to set up and configure. While 2014 sounds like a long time away, when you start laying out a project plan for doing a careful, well-orchestrated migration to either Vista or Win7, you will find your options pretty limited if you wait for Win7. It's certainly doable, but it could be more complex [and] more expensive."

Deployment strategies will be difficult to time because so many organizations have not moved quickly to Vista. There is a window of opportunity to wait for Windows 7, but it may be too wide open.

Good News For IT

Deployment difficulties will likely cause headaches for IT at first; however, deploying Windows 7 brings good news, as well: The OS has some unreported core technologies that exist at a more foundational level.

For example, a new DirectAccess technology will allow IT managers to use an "always managed" approach for remote workers who connect over a VPN. It automates security updates, a feature that will be a major perk for overworked admins, and will implement IPv6 and IPSec. Secondly,

Deployment Aids

Any new OS deployment is bound to come with headaches, but Microsoft plans to offer help to companies looking to upgrade.

- Drive support inherited from Windows Vista promises fewer support calls
- Better application compatibility support
- New Fault Tolerant Heap memory management feature isolates OS problems
- Faster startup and shutdown for easing management burden

Win7 offers a Branch-Cache feature that mimics the SMB and HTTP(S) features in the enterprise, yet is easier to deploy and manage. A new Deployment Image Servicing and Management feature will aid in management chores, as well, by helping to manage connected computers.

The long time period for Windows 7 deployment is a chance to strategize about the new operating system, its features, and how it fits within an SME. In the end, this forced evaluation period (and what appears to be a regular beta cycle) can strengthen an organization rather than cause undue surprises, more IT headaches, and OS anomalies. □

PHYSICAL INFRASTRUCTURE

OCTOBER 31, 2008

Enclosed Server Rack For Noise Reduction

GizMac XRackPro2

Noise from computer equipment is on the rise. As the manufacturers of computer equipment try to squeeze more computing power into less space, heat increases, while fan size often shrinks. With more heat and smaller fans, computer equipment becomes louder and more irritating from the faster spinning, high-pitched fans.

GizMac XRackPro2 is the solution for noise produced from rackmount equipment. The XRackPro2 enclosed server rack can reduce computer equipment

noise up to 80%. Based on an industry-standard four-post rack and a deep rail-to-rail distance, the XRackPro2 can accommodate most types of rackmount equipment and will help create a more productive workplace by removing distracting noise.

Loud rackmount computer servers, RAID systems, switches, and other equipment become much quieter inside the XRackPro2. This acoustically engineered rack uses multiple sound reduction methods to reduce the noise levels.

The significant reduction in noise of the equipment inside the XRackPro2 allows people to work near loud computer systems without distraction.

In addition to reducing noise, the XRackPro2 filters the incoming air, provides key-lockable doors, and allows for mobility. Air filters, locking doors, and wheel options are available on all models. These additional features provide benefits that make the XRackPro2 an even greater value in the fight to reduce computer equipment noise.



GizMac XRackPro2 rackmount cabinets reduce noise and are ideal for Apple, Linux, SGI, Sun, Windows, and other PC servers.

Starts at \$599.99

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XRackPro
By **GizMac**

Mixed Signals

Decoding Enterprise Email & Communications Needs

by David Geer

SMEs RELY ON INCREASINGLY high-tech modes of communication to stay competitive. Email, IM, VoIP, and smartphones add functionality to an organization, but they also create additional challenges for the IT departments that must support and provide them. In order to apply multiple communications successfully, an enterprise must know what it needs, acquire the right technologies and services, and keep the devices secure and compliant.

Email Challenges

Email has become so ubiquitous that even two people starting their "enterprise" in a garage have access to it. The challenge is not about whether you have email—it's about how you maintain email uptime. "Email is the lifeblood of most organizations. It's essential to operations," says Douglas E. Rahn, president and CEO of IND (www.indcorp.com). With employees working remotely and accessing email via their smartphones, email uptime has become a 24/7 critical issue for business operations, even for companies that have traditionally operated from 9 to 5.

"Server clustering is a solution to this challenge," says Rahn. By clustering two or more servers to work together in tandem, an SME's IT department (or outsourced email provider) assures fault tolerance should a single server go down. Clustering enables organizations to schedule maintenance for the failed server because the remaining servers keep the service running without abatement.

Following uptime, spam is still email's second largest nemesis, Rahn continues. "For every good email, we get 99 spam messages," says Benson Yeung, senior partner of Triware Network Systems (www.tns.com). Spam is replete with viruses, malware, and phishing attacks and takes up lots of valuable bandwidth and storage space.

Yeung says most organizations do not delete spam by default because of false positives—good email mistaken for spam by spam filters. They need that mail, and because of increasingly strict compliance requirements, they need to archive the spam, as well. "The end result is that enterprises must keep adding storage, and they must back that storage up in case it crashes," Yeung concludes.



Companies concerned about their own compliance are requiring their vendors, partners, and clients throughout the supply chain to archive IM, as well. "All companies are subject to court-ordered discovery at any time and, therefore, findings by the court or their legal opponent as to whether they logged these communications," Rahn says.

In response, SMEs should consider technologies that meet legal standards for archiving instant messages securely in accordance with any relevant compliance guidelines.

VoIP Challenges

A major roadblock for VoIP is that companies don't know what kind of VoIP technology they need, whether a hosted solution, a fully managed solution, or something else, notes Leigh Henry, director of product management at Apptix (www.apptix.com). SMEs should clarify what they plan to achieve with VoIP,

Key Points

- Use server clustering to keep email up and running.
- Use a compliant archiving technology for IM.
- Consider VoIP needs and expectations and then research and compare solutions before jumping in.
- Rein in smartphones and devices or consider outsourcing their management.

what their projected growth is, and how much they plan to integrate voice with other technologies. Then they need to talk with the vendors, find the best technological fit for their budgets, and try out a solution, Henry continues.

Hosted solutions are often the best option for SMEs that cannot otherwise afford VoIP. "Hosted solutions are priced more like software as a service. There are no large, upfront investments as there are with in-house technologies," Rahn says. The pay-as-you-go SaaS model may be more appealing in times when finances are short. Many hosted vendors include administration and adds/changes in the base cost of service.

Smartphone Challenges

"Eighty-seven percent of companies increased their use of smartphones in the last year," says Andrew Borg, senior research analyst of wireless and mobility for Aberdeen Group. As usage increases, companies want to see what employees are getting out of the devices and whether they are getting the best rates.

When companies allow users to select from a wider variety of devices or decide to support rogue devices, support becomes more expensive and labor-intensive. "There is a pain point around 500 devices where the company needs a full-time employee to support the mobile deployment. That is one person working 40 hours a week just to manage the devices," says Hyoun Park, research editor for the technology markets group at Aberdeen.

Where possible, companies should limit supported devices to two or three and refuse to support rogue smartphones. Companies that would like to take on more should consider outsourcing wireless device management to vendors offering full service in this arena.

Such services offer complete smartphone and wireless device lifecycle management, including device policy management, billing management, help desk services, and device disposal and refresh, explains Jim Carroll, executive vice president of global wireless services at Rivermine (www.rivermine.com). "These solutions reduce overall costs by making sure people are on the best rate plans and that the company has visibility into device usage," Carroll says.

SMEs save when they know exactly which employees need these devices and ensure that only those employees receive them, Carroll explains. Policies help ensure appropriate usage so bandwidth and minutes are not wasted on personal calls or infected downloads. □

Top Challenge: Porting Email To A New System

One of the biggest challenges for enterprise communications is porting legacy email data to a new email system, explains James Bond, director of engineering at Apptix (www.apptix.com). Data conversion does not happen automatically. "IT cannot go to 1,000 users to update their email to a new system one user at a time," says Bond.

SMEs can use service migration techniques that will help to automate the process. But a simpler solution is hosted email. The company can simply download it without having to visit each workstation manually to set it up. An internal email conversion takes weeks or months. A hosted solution can do an email conversion in a few hours, Bond affirms.

With Yang Out, What's Next For Yahoo!?

What remains uncertain following Yahoo! CEO Jerry Yang's Nov. 17 resignation is who Yahoo! will charge to follow in Yang's much-criticized footsteps and revive the company's business. What is certain is whoever succeeds Yang faces a formidable task in executing that revival.

"They are in corporate purgatory until a new CEO is found," says analyst Rob Enderle of Enderle Group. "Yang was known to be indecisive, and now, he is a lame duck CEO, which makes this problem much worse. I question whether Yahoo! should have announced he was leaving before they had discovered a replacement, as the transition, now, will be particularly ugly."

Yang co-founded Yahoo! in 1994 with David Filo. He took over CEO duties in June 2007 from former Warner Bros. exec Terry Semel, who Yahoo! shareholders criticized late in his tenure over concerns about his salary vs. Yahoo!'s performance. During Yang's CEO tenure, Yahoo! announced employee layoffs and saw its stock plummet from about \$28 to \$10.63.

Perhaps the biggest news-maker came when Yahoo! rejected a \$33-per-share takeover bid from Microsoft, totaling \$47.5 billion.

Arguably cementing Yang's fate was the dissolution of a proposed ad deal with Google early last month due to antitrust concerns. That deal was to bring Yahoo! \$800 million in revenue and \$250 million to \$450 million in operating cash flow in the deal's first year.

Yahoo!'s stock climbed nearly 9% to \$11.55 after Yang's resignation but sank to \$9.14 Nov. 19 after Microsoft CEO Steve Ballmer told Microsoft shareholders "we are done with all acquisition discussions with Yahoo!"

Remains "Chief Yahoo!"

Yang will remain Yahoo! CEO until a replacement is named and will reportedly help in the search. He'll also keep a board seat and "Chief Yahoo!" title. Rumored candidates for the CEO post include Tim Armstrong, Google senior vice president; Peter Chernin, News Corp. COO; Susan Decker, Yahoo! president; Daniel Rosensweig, former Yahoo! COO; and Jonathan Miller, former AOL CEO. In a Nov. 18 report, Gene Munster, Piper Jaffray senior research analyst, wrote if Yahoo! names a well-known industry vet with a solid track record, it could signify that Yahoo! intends to keep control of its operations. Tagging an outsider, though, could signify "the intention to partner or be acquired."

In the interim, Enderle says, Yahoo! should "dramatically cut costs and eliminate projects that won't provide measurable returns in the next six to 12 months" to ensure its existence in 13 months. "The simpler and more profitable the company is when the new CEO takes over, the faster that CEO can move to return the company to growth," Enderle says. Depending on Yang's successor, Enderle foresees a much smaller, vastly more focused Yahoo! in a year. Otherwise, "I see a company that is no longer around. Recessions are company killers, and the clock is ticking for Yahoo!," Enderle says.

by Blaine Flamig



Supercomputers Ranked

According to the biannual list from TOP500, the Roadrunner, a supercomputer from Los Alamos, barely retained its top spot over the Jaguar, a Cray XT5 supercomputer at the Oak Ridge National Laboratory. The top two systems were the only ones able to perform a quadrillion scientific calculations per second. Roadrunner is powered by nine-core PowerX-Cell processors, which are the same chips used in the Sony PlayStation 3, and runs the Linux operating system. Jaguar is powered by Opteron quad-core processors from AMD and uses the CNL OS. Both systems are in national laboratories operated by the Department of Energy. In the top 500 list, HP had the most supercomputers with a total of 209, which represents 41.8%. IBM has 188 systems, accounting for 37.6% of the top 500 supercomputers.

Salesforce Revenue Up

Revenue is up for on-demand CRM application and cloud computing software company Salesforce. The company reports that as of the end of the third quarter, earnings increased by 55%, and the company is optimistic about

the immediate future. CEO Marc Benioff says the company believes it has the right business model for the times with pay-as-you-go, on-demand software. Part of the company's recent success is likely due in part to its acquisition of knowledge management application company InStranet. Salesforce expects it will continue to grow its market share through at least the first three quarters of next year.

Facebook Wins Judgment In Spam Suit

In one of the largest awards yet for a suit filed under the CAN-SPAM Act, Facebook won an \$873 million judgment. The suit charged Adam Guerbuez, Atlantis Blue Capital, and 25 other unnamed people for falsely obtaining login information for Facebook users and sending spam to those users' friends. In March and April of this year, the spammers used stolen login names to send more than 4 million spam messages over Facebook's network. The judgment also includes injunctions to prevent Guerbuez and his colleagues from accessing any Facebook data in the future.

Novell Favored In SCO Case; SCO Plans Appeal

A ruling has been made in Utah in the ongoing case between Novell and SCO, dismissing allegations SCO brought against Novell of slander, copyright infringement, and breach of contract regarding ownership of Unix and UnixWare software copyrights. The ruling upholds most of an August 2007 judgment that declared Novell the owner and a July ruling that awarded more than \$2.5 million to Novell. It is likely that SCO will appeal the decision, however, even though it is currently in bankruptcy and has an outstanding lawsuit with IBM, which has been stayed while SCO has been in bankruptcy.

Smartphone Browsers See Growth

According to a new report from ABI Research entitled "The Mobile Browser Market," mobile phone users are accessing the Web from their cell phones at an accelerated rate. Search Web sites, social networking sites, and online video sites are all fueling the demand for the mobile Web, and ABI Research says it expects smartphones with enhanced Web capabilities to increase from the 130 million shipped in 2008 to 530 million by 2013. The growth is also spurred by companies such as Adobe, Google, and Microsoft that are offering more mobile products that enhance the functionality of mobile Web browsers and applications.

IT In The Spotlight

Examining Strategies To Demonstrate IT's Value To The Enterprise

by Christian Perry

IF A CYNIC CAN BE DEFINED as someone who knows the price of everything and the value of nothing, perhaps anyone outside of IT can now be called a cynic. IT's value to the enterprise is often overshadowed by its inevitable impact on the bottom line. In turn, IT managers are increasingly under the gun to demonstrate IT's overall worth.

"Showing the value of provided activities and well-planned, well-executed projects that leverage all aspects of IT will allow organizations to identify areas and activities that need to expand and why investment dollars in particular areas are necessary," says Adam Nelson, director of global client management at Keane (www.keane.com). "It also shifts the perception of the IT organization from provider to partner that warrants a seat at the strategic planning table and executive committee."

Unfortunately, Nelson explains, fingers traditionally are pointed at IT for isolated missteps rather than the IT organization receiving praise from the daily support it provides. These support activities need to be highlighted so that IT is consistently valued and to create balance that offsets atypical mistakes.

Accentuate Activities

According to Dr. Amjad Umar, director and professor of eBusiness at the Harrisburg University of Science and Technology (www.harrisburgu.net), few companies can survive in the current competitive world without reliance on IT. However, IT managers still need to show alignment with business strategy and support processes that are essential for business.

"Most of the IT planning methodologies, starting from the very old but still heavily used IBM Business System Planning [BSP] methodology, emphasize that only those BPs [business processes] should be automated that support the business strategy. In other words, the idea is to be a vital player in the business strategy and align the IT strategy to business strategy," Umar says.

Activity-based costing is also an effective way to demonstrate value, according to Nelson. The identification of necessary activities such as user maintenance (access, security, email, transferring divisions) and hosting (system maintenance, electricity use, license fees) can show the enterprise

the cost needed to "keep the lights on" based on the processes rather than using the older method of FTE (full-time employee) cost, he says.

"Then, by identifying the processes and typical costs associated for system development and including all activities—requirements, architecture, development, management, testing, and production—and applying a baseline against delivered and expected projects, IT can identify more accurate spending and areas where IT and the business can partner more effectively and where they partner well already," Nelson says.

Bill Metallo, vice president of sales for Seeburger (www.seeburger.com), reveals a method for demonstrating value through a consultative approach with goal development. "Find a goal or pain that is important to a business user and develop a solution that solves the problem. Many times, IT will be faced with a decision to build or

"For technology, an IT organization must look to its industry and business. In a customer-oriented world such as banking, customer relationship management technology is critical, and it should be leveraged in the retail market—especially in a down economy—to promote cross- and up-sell marketing, something banks have been doing for

Key Points

- Highlighting critical activities that are required to keep the enterprise wheels rolling, as well as pointing to IT services tied to business processes, can help IT demonstrate its value.
- When dealing with trend technologies, be prepared to show quantitative evidence of value return.

years. In manufacturing, logistics and inventory technology is critical; however, business intelligence and business process management tools, if properly planned and implemented, can help streamline supply chains," Nelson says.

He adds that trends such as open-source, cloud computing, and Web services should be thoroughly evaluated by experts who can implement these technologies where return can actually be measured. "Well-planned, funded programs to research, prototype, and determine true quantitative value that may or may not lead to an implementation decision usually cost far less than a few folks spending their night online and then months trying to convince anyone who will listen that the trend could do wonders for their organization," he says.

Umar adds that IT services related to business processes that are being phased out should be put on the back burner, regardless of any emotional attachment to them. To determine which processes are pertinent, Umar suggests a straightforward approach that requires examination of the following: business processes needed to support the business strategy; enterprise apps that support the business processes; platforms needed to house the enterprise apps; networks that connect the platforms; and security to secure all of these elements.

Future Value

Although an economic crisis can spur IT organizations to show their value, it's beneficial to develop strategies that ensure this value continues to be shown well into the future. Nelson says that IT managers should show transparent cost and return based on activities and not number of resources, because when value is attributed to activities, priorities can be more easily determined and scaled up or back based on economic conditions.

"The activities a solution supports should be documented and current costs calculated," he says. "As the solution is developed and deployed, project costs should be maintained. As the solution is used and processes become modified, areas of efficiency, such as higher volumes or attributed cross-sales, should be identified in the program and activity cost model, enabling quantitative value to be highlighted. With financial analysis being built into the IT program, anecdotal and qualitative information will be bolstered and the value the IT organization provides unequivocally demonstrated." □



buy the solution. If you consider building a solution, you must consider all challenges and costs, including ongoing support and maintenance," he says.

Where To Point The Spotlight

Efforts to shed light on IT's value should not be driven by anecdotes but instead by tangible, quantitative proof. For starters, Nelson says, an efficient systems development life cycle should be highlighted so that the enterprise understands what is necessary to design, deliver, and operate a project and the resulting system or application. Also valuable are core production services and the support of staff for their basic IT needs.

Top Challenge: Making A Case For Security

The business hasn't suffered a serious security breach in years, yet IT is still spending plenty to prevent intrusions that could lead to data theft. The solution is to cut back on security, right? Wrong, says Ed Moyle, a manager with CTG Security Solutions (www.ctg.com).

"Information security is not necessarily at—or even near—the top of the IT budget from a priority standpoint. However, the advice I give is twofold: First, look at ways you can justify the projects you have on your to-do agenda by demonstrating clear return, and second, see where there are 'grassroots' opportunities—a

bottom-up approach—and take steps to try to make them happen," Moyle says.

He explains that ROI is the key to getting the business side to invest in technology projects, but few IT managers can convincingly demonstrate ROI to business. This becomes even harder with security because of vagaries such as 'likelihood' and 'risk.' To address this challenge, Moyle recommends that IT managers consider creation of metrics within their business by creating a funded initiative through which change is driven or by getting staff to innovate and make something happen on their own.

PRODUCT OF THE WEEK

Accordance USA Helps SMEs With Backup Worries

ARAID Means Redundancy, Redundancy Means Peace of Mind

by Chris A. MacKinnon

• • •

WHERE WOULD THE SMALL to midsized enterprise be without redundancy? In enterprise terms, redundant systems mean hardware and data backup. If a hard drive fails, the next hard drive steps in to take its place. Accordance USA, a data protection firm, specializes in helping enterprises maintain data integrity using ARAID RAID storage controllers. These ARAID systems help companies to duplicate their data in real time, ensuring no data loss and no down time.

Robb Moore, CEO of ioSafe (www.iosafe.com), says the concept and term of RAID has evolved to solve multiple limitations concerning hard drive technology. Moore notes, "A collection of disks in a RAID configuration still look like a single volume yet can

improve the speed, redundancy, or capacity over using a single disk. The two most popular levels are RAID 1 and RAID 5." Moore says typical RAID 1 uses two disks that are mirrored in real time. He says RAID 1 has evolved as a simple method to address a single mechanical disk failure. Other RAID levels are available to optimize speed, redundancy, or capacity.

Moore says data loss can be one of the most devastating events. "One of the simplest ways a business can protect itself is to utilize RAID 1 technology in both their server and backup storage devices. 100% of hard drives fail eventually. RAID 1 technology is the simplest way to mitigate this risk."

Enter Accordance

Steve Johnson, president of Accordance (515/223-4845; www.accordancesystems.com), says hard drives fail—period. He says this type of catastrophic event is happening at a growing rate as drive capacities continue to increase. He elaborates, "Although hard drive manufacturers estimate drive failure to be 1%, researchers find, on average, that 2 to 4% of all hard drives fail each year, and under certain conditions, the drive failure rate is as high as 13%. To protect against losing your data, ARAID keeps two copies of your hard disk data at all times. In the event that one of your drives fails, ARAID always keeps one copy of your data, and your computer continues to operate. Tape is prone to human error and is obsolete with ARAID technology." Johnson says this is the new discipline for PC and server data security.

Accordance's ARAID 1000L and M100 are the company's classic IDE RAID controllers, handling 3.5- and 2.5-inch drives, respectively. Johnson says these models are excellent sellers as customers work toward extending older designs' life cycles. The ARAID 1000L is also available as an external model with USB, FireWire, and IDE connectivity. The 1000L models are actively maintained by Accordance; Johnson says this is evidenced by its support for 1TB drives. The M100 is about the same size as a CD-ROM drive and is an internal unit.

According to Johnson, the company's ARAID 2000 is compatible with all current

3.5-inch SATA drives on the market and is Accordance's best-selling model. He notes, "We've tested 3.5-inch drives from major manufacturers in capacities up to 1TB without issue. Note that the ARAID 2000 model will accept SATA or IDE trays and will also accept SATA or IDE controllers." Johnson says the 2000 is available as an internal unit or externally using USB, FireWire, or SATA controllers.

The ARAID 2200 (similar to the ARAID 2000 but more compact and with a faster rebuild speed) is available as an internal unit or externally using USB or SATA/eSATA controllers. The ARAID M200, which uses 2.5-inch SATA notebook drives, is also about the same size as a CD-ROM drive. Accordance offers the M200 only as an internal unit.

SME Appeal

The ARAID provides RAID hard drive data protection to any PC or server, making it ideal for data centers with different types of computers. And no software is required to operate the ARAID. All RAID processing is handled on the ARAID device controller, independent of the computer's main processor. Johnson says the ARAID creates a RAID 1 array on the fly from an existing drive with no danger of losing data on the original. He says this capability probably sells more ARAIDs than any other feature.

Johnson notes that the typical RAID 1 array is not considered to be a backup solution. "While data is replicated," he says, "it is not safe from viruses, spyware, etc. An ARAID is different because you can quickly remove a drive from the unit and replace it with another drive within seconds without opening the PC case or interrupting computer operation as an effective means of backup. The removed drive can be treated as a backup and taken offsite for secure storage. The ARAID recognizes the newly inserted drive and immediately begins to mirror all data to it."

In Johnson's opinion, system integrators like ARAIDs because a simple addition of the controller differentiates the product line from the competition and improves profitability by not only selling the ARAID but at least one additional drive, as well. He says

the ARAID's easy method of implementing a backup is virtually foolproof. He adds, "Product managers frequently use ARAIDs in their midrange products where data safety considerations have lagged. This is particularly true in the embedded marketplace. The real beauty for product managers is the ease with which their existing models can be upgraded with an ARAID without redesign." He says IT managers also like the uptime that an ARAID enhances.

Human error is one of the leading causes of data loss. If your protection strategy is complicated, it's prone to a greater risk of human error.

Recovery and testing are also key to mitigating the risk of data loss. RAID 1 keeps it simple if you want real-time protection against drive failure.

Moore says at ioSafe, the company has baselined the Accordance ARAID architecture for a number of its fire- and flood-proof storage systems. He says the combination of natural disaster protection, simple operation, and recovery greatly reduces risk of loss. **P**



PRODUCT OF THE WEEK

Accordance USA ARAID family of RAID storage controllers

Description: RAID storage controller with an advanced RAID 1 controller board, which stores mirrored copies of data on two hard drives. No software or additional hardware is needed to operate the ARAID.

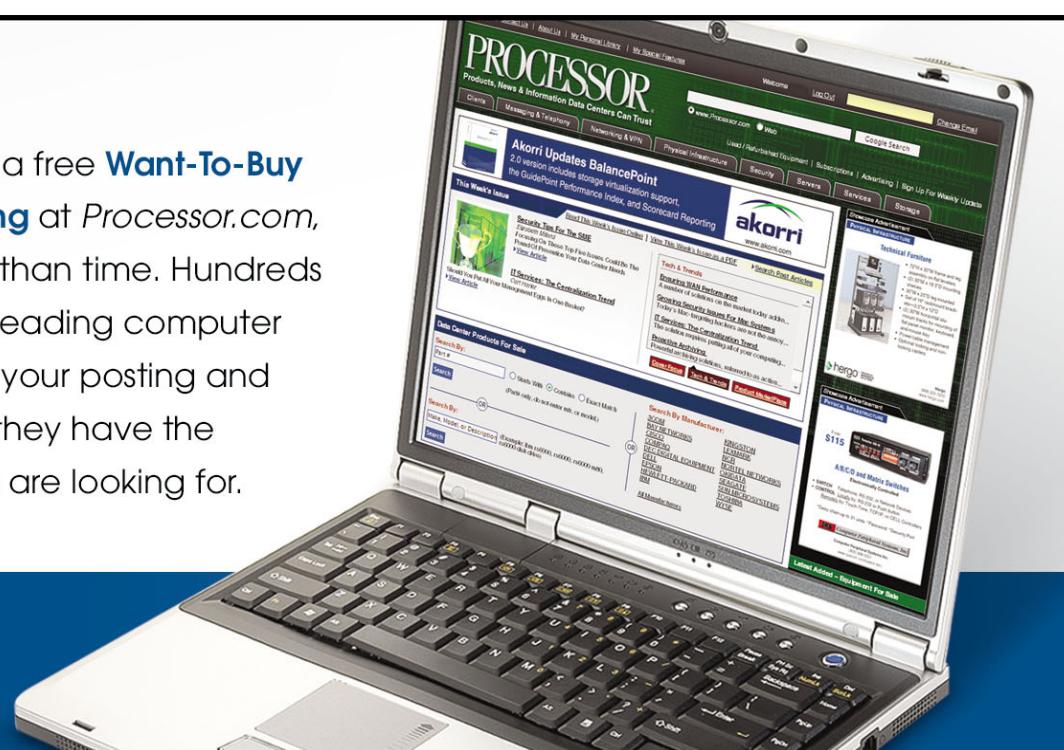
Interesting fact: An ARAID makes backup easy. By simply removing a drive from the bottom bay and replacing it with another, you get a perfect digital backup every time.

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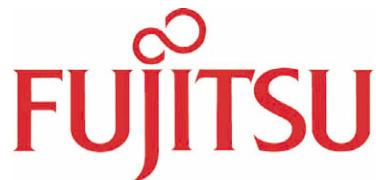
CLIENTS

■ Datacard FP65i & RP90i

Datacard launched the FP65i and RP90i financial card printers, which were developed specifically to address needs of financial and retail instant issuance markets. Datacard says the FP65i gives financial and retail issuers the flexibility to print a custom color background on blank cardstock, as well as personalize a preprinted card. A rear-indent printing feature integrates security into card programs by deterring counterfeiting and meeting Mastercard security character recommendations for instant issuance. The RP90i includes retransfer printing technology that outputs over-the-edge, full-color cards. The printer also provides security features aimed at financial markets, such as a locking enclosure to protect cardstock, supplies, and card reject areas.

■ Fujitsu Interstage XWand Version 10

Fujitsu announced Interstage XWand Version 10, the latest release of its XBRL software, which is designed to help companies increase transparency and governance around financial activities. The newest release is one of the industry's first offer-



ings to incorporate business rules in XBRL-based reporting with the adoption of XBRL Formula 1.0, the latest extension to the XBRL specification. The U.S. Securities

and Exchange Commission has proposed a new mandate, which would require companies using U.S.-based, generally accepted accounting principles with a market capitalization of more than \$5 billion to use XBRL for financial disclosure, beginning next year. All public companies would follow suit by 2011. Data can be extracted directly from Microsoft Excel spreadsheets to automatically create XBRL reports. A data-mapping function lets users easily convert XBRL data into formats that can be used by other common databases and systems.

■ Moderro Technologies Xpack Internet Computer

Moderro Technologies released the Xpack Internet Computer, a turnkey Web-centric cloud computer. The Xpack Internet Computer is an integrated (hardware, operating system, and Web management) solution for the cloud desktop. The system's user interface was written by Moderro specifically for interacting with Web-based applications. The Xpack Internet Computer includes a USB keyboard and mouse and a standard VESA mount option, which allows the hardware enclosure to be mounted to the back of the LCD. Dual VGA/DVI output options—coupled with dual monitor auto-detection—allow Xpack users to increase productivity by using one display for monitoring and another for working. Xpack uses Web applications to let users keep their data on Moderro's integrated cloud storage or on a personal USB storage device.

■ RAiO Technology RA8806

RAiO Technology announced the RA8806, an LCD controller that is designed for use in instrumentation, medical equipment, control applications, and industrial

HMI applications. The RA8806 has a 4/8-bit 6800/8080 series MPU interface. The integrated controller chip has 512KB of font ROM and a four-wire touch-panel controller; supports 8-bit PWM contrast control and four grayscale displays from 128 x 64 to 640 x 240 resolutions; and allows for 90-, 180-, and 270-degree font rotation and character enlargement. RAiO now provides free RA8806 sample chips with an evaluation board to customers.

■ Sun Microsystems MySQL Enterprise

Sun has unveiled a version of MySQL Enterprise subscription service. This version is designed to better the speed and uptime of MySQL database applications and gives subscribers access to the new MySQL Query Analyzer tool, which monitors query performance to precisely find the correct problem SQL code. MySQL Query Analyzer also has a new aggregated view, new sortable views, and searchable and sortable queries. Finally, MySQL allows for historical and real-time analysis, along with drill-downs that sample query execution statistics, completely equipped with variable substitutions and results that are explained.

NETWORKING & VPN

■ BelAir Networks BelAir20 AP

New from BelAir Networks is the BelAir20 AP indoor access point. This 802.11n AP is a compact dual-radio/dual-band model that has been optimized for service providers. It can be used as a bridge for outdoor wireless nodes and supports wired or wireless backhaul. The BelAir20 AP runs the BelAirOS operating system and BelView network management software.

■ CA Out-Tasking For Mainframe Security

CA, as part of its Mainframe 2.0 initiative, launched its Out-Tasking solutions, which are the firm's latest turnkey management software and services solutions designed to help users govern, manage, and secure mainframe environments. Out-Tasking consists of bundled management services in a subscription-based package. Out-Tasking's capabilities include compliance requirement tracking, capacity planning, chargeback reporting, database management, service level management, change management, and system diagnostics. CA's first Out-Tasking

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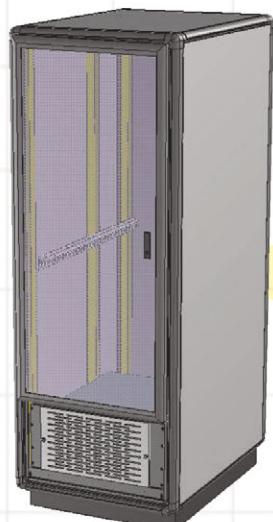


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42u Cabinet in depths of 36" or 42" d
Allows from 4-10" of space for cabling inside the rack
Rack rails adjust full left, center or right to drop cable bundles
Open 4 post design or enclose for locked cabinet

Product Releases

Continued from Page 15

solution is CA Compliance Out-Tasking for Mainframe Security, which lets users identify and remove obsolete, unused, and rogue user IDs and access rights, and it helps users identify and interpret potential security issues associated with the z/OS operating system, programs, files, and libraries.

■ DataSynapse Federator

DataSynapse has announced the release of its application service management software, DataSynapse Federator, which provides centralized command and control of disparate computing pools managed by the DataSynapse runtime environments (FabricServer and GridServer) across different platforms, versions, and locations. Federator provides increased application performance against service-level agreements; greater infrastructure utilization; and reduction in future IT infrastructure growth rates.

■ GFI LANguard Version 9

GFI has announced version 9 of LANguard, a tool that allows administrators to scan, detect, assess, and rectify vulnerabilities on their networks and to secure them with minimal administrative effort. Features include Network Auditing, which tells administrators what they need to know about their networks by retrieving hardware information on memory, processors, display adapters, storage devices, motherboard details, and printers. The Vulnerability Management includes the ability to identify and report on unauthorized software installations and configure GFI LANguard to uninstall these applications whenever they are detected on the network. It also features an easier way to manage network scans, install patches, and get a complete picture of the security setup on networks.

■ Metageek Wi-Spy DBx

Metageek announced the Wi-Spy DBx, a tool that allows IT staff to visualize multiple 802.11a/b/g/n networks. Wi-Spy DBx includes Chanalyzer software that displays data in graphical formats for easy analysis. IT staff can quickly move between frequency ranges. The Wi-Spy DBx also includes hardware controls that allow users to zoom in and see greater detail on the network. Users can install, analyze, troubleshoot, and optimize their 2.4GHz and 5GHz networks. The Wi-Spy DBx has a frequency range of 2.4 to 2.495GHz and 5.15 to 5.850GHz, and it offers a resolution bandwidth of 53 to 750KHz. The network tool is priced at \$799.

■ Tidal Software Intersperse 8.0

Tidal Software has introduced Intersperse 8.0, which observes J2EE and .NET applications, along with their transaction component performance, to generate consequential metrics for controlling applications and high-level business processes. By utilizing a mixture of lightweight JMX (Java Management Extensions) and byte-code injection, Intersperse 8.0 can determine the need for both lightweight and deep-level analysis. Additionally, Intersperse 8.0 can provide proactive alerts if a process stumbles upon a problem. This helps to quickly identify problems. Finally, Intersperse 8.0 creates an automated response to instigate a remedial action to keep a Web application running without human participation.

PHYSICAL INFRASTRUCTURE

■ Perle Systems IOLAN SCS Console Server

Perle Systems announced that its IOLAN SCS Console Server now provides

support for fiber cards. The support of fiber cards integrated with the IOLAN SCS offers superior reliability over external Ethernet copper-to-fiber converter boxes for connecting to fiber infrastructures. Designed for enterprises that wish to deploy a fiber-based, out-of-band management network to manage remote equipment via their serial console ports, the IOLAN SCS supports the third-party giga-



byte fiber card via its standard PCI interface. The console server also features built-in Ethernet and Redundant Path technology to provide reliable serial console port access.

■ Raritan Dominion PX PDU

Raritan has announced that its Dominion PX intelligent PDUs now support IBM Systems Director Active Energy Manager 4.1, which is part of IBM's Cool Blue Portfolio. AEM (Active Energy Manager) gives clients a view of the actual power being used rather than benchmarked power consumption. Additionally, AEM can allocate, match, and cap power and thermal limits in data centers at the rack, chassis, or system level. Raritan says by plugging systems into its Dominion PX PDU, AEM can collect power data for each device to present a more thorough view of energy use within a data center. Raritan's PDU collects detailed, outlet-level metering data on servers and other equipment connected to

the power strip. Integrated intelligence, connectivity, and security technologies let the PX PDU determine actual power usage of individual servers, rack capacity, and environmental data.

■ Staco UniStar P

Staco has announced that its UniStar P series single-phase UPS is available in rack-mounted designs for industrial, commercial, and office environments. The UPS is available in 6kVA models and can protect from outages and sags in incoming line voltages from 160 to 280VA at 45 to 65Hz. Users can install up to four UniStar P units for redundancy or additional capacity.

SERVICES

■ Océ Business Services Onsite Discovery Management

Océ Business Services introduced Océ Onsite Discovery Management, an out-sourced discovery management service located onsite at law firms and corporate legal departments. The discovery management service spans electronic discovery and paper evidence processing, as well as litigation technology management. Océ Onsite Discovery Management offers three service levels, each of which includes an onsite discovery consultant to manage projects. The first service level offers a complete discovery management system, including electronic discovery processing, paper evidence processing, and litigation technology management. The second service level offers electronic discovery processing; the third level focuses on paper evidence processing. All three service levels provide remote services that include offsite developer resources and access to the Océ

SECURITY

OCTOBER 17, 2008



Comodo SecureEmail uses PKI-based technologies to encrypt and digitally sign outgoing emails, preventing tampering during transmission.

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Email Security Software Provides "Whole Journey" Encryption

Comodo SecureEmail

Unsecured email messages can potentially be intercepted, read, or edited by anyone along the way. Most of the companies handling email messages are trustworthy, but if one computer on an email's route is compromised, anyone could read the private information within.

To those concerned about email security, Comodo offers its SecureEmail. Comodo SecureEmail employs PKI-based technologies that encrypt and digitally sign outgoing emails, preventing tampering during transmission.

Many enterprises encrypt messages as they leave the corporate perimeter, leaving internal mail vulnerable to malware. Comodo SecureEmail provides whole-journey encryption from sender's mail client to recipient's mail client—the only way to completely secure the exchange. Comodo SecureEmail helps companies comply with HIPAA,

Sarbox, GLBA, PCI, and the UK Data Protection Act.

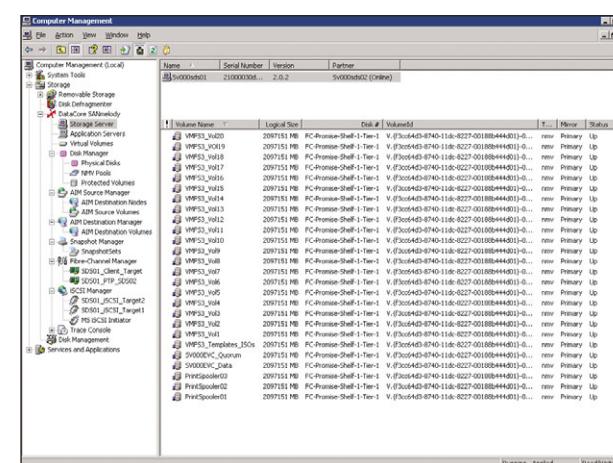
SecureEmail integrates with Microsoft Outlook, Mozilla Thunderbird, and other S/MIME-capable email clients. It includes a wizard to download a free Comodo email certificate, or it may be used with third-party SSL certificates. Comodo SecureEmail automatically generates a unique single-use session certificate to encrypt outgoing emails to recipients whenever an email certificate is not present on the system.

Comodo offers this solution free to encourage the practice of signing and encrypting email communications to protect users from vulnerable email exchanges.

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STORAGE

OCTOBER 3, 2008



DataCore SANmelody provides best-of-breed storage virtualization

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DataCore Does For Storage What VMware Does For Servers DataCore SANmelody

Fairway Consulting Group offers services based on best-of-breed virtualization technologies, including storage, server, desktop, application, and disaster recovery. As a channel partner with several virtualization manufacturers, FCG helps companies focus on sustainability, data growth, performance demands, end-of-life hardware, and disaster recovery.

FCG is a Premier Channel Partner with DataCore Software, with products focusing on storage virtualization, management, and monitoring. DataCore SANmelody, SANsymphony, SANmaestro, and Traveller CPR offer a combination of features and functionality to meet the needs of any enterprise.

DataCore SANmelody overcomes the high cost barrier and complexity of traditional SANs by converting x86-based servers (physical or virtual) into fully capable SAN controllers that can

virtualize any raw disk and serve them to application servers over iSCSI or Fiber channel.

DataCore is intelligence only, delivering the flexibility that conventional hardware virtualization cannot provide. And with DataCore, you can leverage your existing hardware and add new hardware later on-the-fly, with no interruptions.

DataCore's SAN solution features include:

- Hardware independence
- 65% increased storage utilization on average
- True active/active high availability
- Asynchronous IP Mirroring
- Snapshot (COW or complete image)
- iSCSI and Fiber Channel-ready
- 100% investment protection on upgrades



Product Releases

dataDeliver ASP document review system, a Web-based tool that provides collaborative review and production of scanned paper and electronic files. Pricing for the Océ Onsite Discovery Management service is based on a fixed monthly fee that enables users to forecast and contain discovery management costs. The fee includes monthly processing allotments for paper and electronic content.

Symantec Veritas Operations Services

Symantec has released Veritas Operations Services. This new cloud computing-based online service platform aids in the identification of hidden risks located in enterprise data centers, which can boost service availability and improve productivity of IT staff. Two services immediately available include Veritas Installation Assessment and Veritas Storage Foundation Health Check. These two services are designed to give an organization alternatives to traditional reactive operations models. They also allow IT organizations to execute prioritized, preventive maintenance leveraging the last-known good configurations, best practices, and data center risks.

STORAGE

Asigra Storage I/O & Data Validation Tool

The Storage I/O and Data Validation Tool, a utility designed to help Asigra storage partners, MSPs, VARs, and users ensure that optimally tuned and architected storage servers are implemented as part of their disk-based data protection infrastructure to maximize ROI (return on investment), is available from Asigra. The tool measures the communication speed

between the backup vault or staged backup device and the backup targets; it also provides precise analysis to identify which storage systems under consideration for deployment or already deployed are optimized to work most effectively with Asigra Televaulting and any other I/O-intensive general computing application to support positive ROI.

Crossroads Systems ReadVerify Appliance 3.0

Crossroads Systems introduced the latest version of its ReadVerify Appliance, which is designed to assist users in the real-time management and monitoring of tape libraries, drives, and storage media. ReadVerify Appliance 3.0 offers the new ArchiveVerify media validation feature, which employs user-defined policies to validate the readability of data and guarantee data restore. The ReadVerify Appliance 3.0 helps to improve backup completion rates



with its expanded alert and reporting capabilities, extended library and tape drive support, and an enhanced Web-based user interface.

EMC Captiva InputAccel 6 & Captiva Dispatcher 6

EMC announced new versions of Captiva InputAccel and Captiva Dispatcher, products designed to advance enterprise capture

Go to Page 18

NETWORKING & VPN

SEPTEMBER 19, 2008

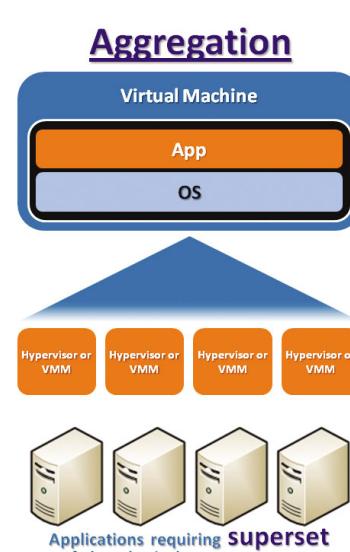
High-End Computing Goes Virtual vSMP Foundation™ Aggregation Platform

For IT organizations that find high-end servers too expensive and are fed up with the complexities of setting up and managing clusters, there is a new innovative technology on the market that can solve these user problems.

The innovative Versatile SMP™ (vSMP) architecture from ScaleMP aggregates multiple industry-standard x86 systems into a single virtual system, delivering a high-end SMP computer. The ScaleMP vSMP Foundation aggregation platform creates virtual systems ranging from four to 32 processors (128 cores) and up to 1TB of shared RAM. It is optimized for compute- and memory-intensive workloads, making it ideal for the high-performance computing market. It provides a single virtual system across multiple nodes of a cluster or blade server system, dramatically simplifying installation and ongoing management. It delivers the operational simplicity of traditional SMP systems while maintaining the low acquisition costs associated with clusters.

The ScaleMP vSMP Foundation Standalone software can be used to run extremely large jobs, models, and simulations, even with a single process; with up to 1TB of RAM, it fits most of the large simulations in the industry. By providing up to 128 cores of processing power, parallel applications significantly improve performance and run time; they use different parallelization models such as threaded, OpenMP, and MPI with the highest performance.

vSMP Foundation Standalone is used in a range of high-performance and technical computing applications.



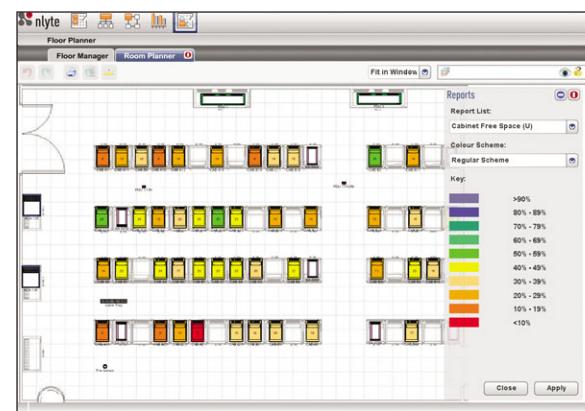
ScaleMP vSMP Foundation Standalone aggregates multiple x86 systems into a single virtual system

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NETWORKING & VPN

SEPTEMBER 19, 2008



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Drive Down Data Center Costs

Global DataCenter Management nlyte® 5.0

Data Center operating budgets have been hit hard as energy costs continue to rise. The complexity of the data center and the interrelationships between the assets and the applications they serve demands a management solution that understands the current state of the environment and provides the ability to plan and model for future needs.

Built by data center professionals for data center professionals, the nlyte® suite from GDCM (Global DataCenter Management) optimizes data center assets by visualizing, monitoring, and modeling current and planned changes to this critical infrastructure. The software provides immediate feedback on planned and implemented changes to facilities, racks, servers, cabling, power connections, and other assets and resources. With a few clicks, nlyte can supply users with the data they need to identify important trends or analyze how planned

changes will impact redundancy, power, cooling, space, network, and cable capacity.

The nlyte suite's auto-allocation capability removes the guesswork of finding the best rack for new server placement and, in many cases, can recover unused rack capacity, delaying or eliminating the need to expand the existing facility. The nlyte workflow module can help establish standard policies and procedures for data center operations, reducing implementation time and eliminating costly mistakes.

Companies using nlyte are seeing significant reductions in costs related to power, space, and human capital, with an ROI of less than 12 months depending on installation's size.



NETWORKING & VPN

SEPTEMBER 19, 2008

Extend Your Copper Network's Reach

Transition Networks Media Converter Offers Solid Option



ARE YOU looking to extend the reach of an existing copper network? Trying to alleviate copper cabling congestion? Addressing EMI/RFI interference within your data center?

The Plug & Play Universal Systems Media Converter Module from Transition Networks lets you gain all of the benefits of a fiber-optic infrastructure and the advantages of a preterminated, modular solution, all while using the low-cost legacy copper electronics currently available.

A jointly marketed venture between two industry leaders—Transition Networks and Corning Cabling Systems—the Plug & Play Universal Systems MCM (Media Converter Module) is a Gigabit Ethernet (1000Base-SX) media conversion solution within a Plug & Play Universal Systems. Each Media Converter Module is configured with 12 modular RJ-45 ports on the front and two MTP Connector ports on the back. Each

port on the MCM converts a Gigabit Ethernet 1000Base-T signal-, transmitting over copper-, to a 1000Base-SX signal-, transmitting over fiber. Media Conversion Modules are powered by redundant power supplies. An optional remote management module is also available to alert network managers of a power supply failure or fan fault.

Whether using two modules in the 1U housing (24-port capacity) or up to eight modules in the 4U housing (96-port capacity), the MCM provides the highest density media conversion solution available. Using the Media Converter Module lets you reap all the benefits of installing a modular MTP connector-based fiber cabling system, while leveraging your existing copper-based electronics.

Transition Networks Plug & Play Universal Systems Media Converter Module

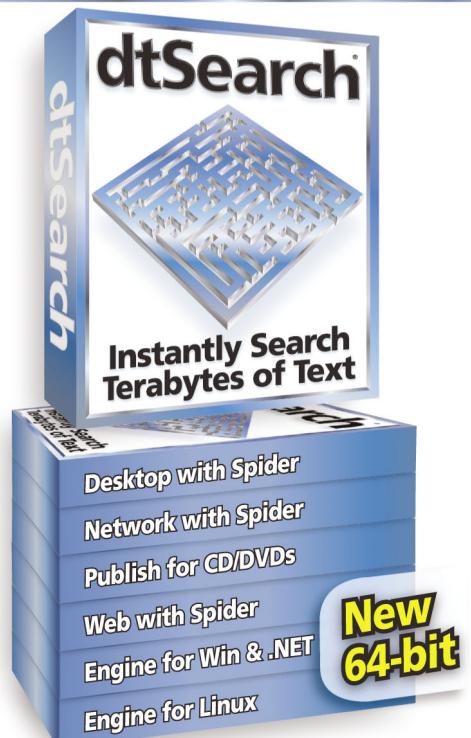
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Product Releases

Continued from Page 17

performance and scalability while simplifying ease of use, development, and deployment in both centralized and distributed capture environments. The products are designed to provide customers with a new SOA (service-oriented architecture) to leverage capture as a service to increase the adoption of capture throughout the enterprise. As a result, organizations experience higher ROI by reducing costs and risks, accelerating business processes, and lowering total cost of ownership.

Captiva InputAccel 6 features highly configurable clients for transactional capture applications; improved performance, scalability, and high availability; and simplified customization using SOA and .NET. Captiva Dispatcher 6 works with Captiva InputAccel 6 for intelligent document recognition, automatically identifying incoming documents as they're captured, routing them, and extracting data from various document formats. New features include advanced check-reading capability, integrations with the latest Captiva InputAccel 6 advancements, and updates that allow it to classify documents and extract data more quickly and accurately.

■ FalconStor Software File Interface Deduplication System & Virtual Tape Library 5.1

A new data deduplication system designed to provide another space-saving option for data centers, the FIDS (File Interface Deduplication System), along with VTL (Virtual Tape Library) 5.1 enhancements, has been announced by FalconStor Software. FIDS features include CIFS and NFS file interface for block-level deduplication, immediate file-level access to deduplication repository, optimization for third-party backup software, many-to-one replication capabilities included for global deduplication, and availability as a virtual appliance for VMware and Microsoft Hyper-V.

■ Lenovo Secure Managed Client

Lenovo announced SMC (Secure Managed Client), a storage-based desktop computing solution that can help enterprises reduce IT costs and security risks by turning off hard drives and storing all data in a non-server remote location, while also offering users the flexibility and performance of a traditional desktop PC. The SMC solution consists of a client, a hard drive-less ThinkCentre desktop PC with Intel vPro technology, a Lenovo codeveloped software stack, and a centralized Lenovo Storage Array powered by Intel. According to Lenovo, SMC offers several benefits over current server-based computing options such as blade PCs, thin clients, or desktop virtualization, including the preservation of PC fidelity, energy efficiency, and security. The SMC solution is offered on the ThinkCentre M57p desktop PC and will also be offered on the recently launched ThinkCentre M58p early next year. SMC is backed by Lenovo service and support. SMC customers can choose Lenovo ThinkPlus Priority Support.

■ Quantum DXi7500 Express

Small and medium-sized enterprise environments now have the option of a new turnkey deduplication appliance from Quantum. The DXi7500 Express disk-based backup appliance comes preconfigured with VTL and NAS interface licenses, along with the QuikFit configuration tool. The bundled system has an MSRP of \$98,250.

■ Reldata Unified Storage Solutions

Reldata announced a new disaster recovery solution that can replicate data over great distances without slowing down, without duplicating existing primary storage

infrastructure, and without using server-based replication software. Reldata allows heterogeneous replication from a non-Reldata storage platform in the data center, remote data protection that features both block- and file-based replication, and extensive rollback functionality.

■ Sans Digital MobileRAID MR4UT

Overcoming the 2TB-per-volume limit of some OSes is the goal of a new four-bay RAID enclosure from Sans Digital. The MobileRAID MR4UT allows up to 6TB in Linux, Mac OS, and Windows Server 2003/XP 64-bit/Vista. It also can divide a large RAID into four volumes to bypass the OS capacity limit. The compact eSATA/USB 2.0 device supports RAID 5, JBOD, and other configurations.



Software Security Solutions™

Layered Security Solutions - Simplified

■ Software Security Solutions S3 DataSafe Online Backup

Software Security Solutions announced that S3 DataSafe Online Backup brings automated backup to Software Security Solutions' Layered Security Solution. S3 DataSafe Online Backup was created to deliver secure, offsite storage for crucial information and for the best security and privacy offered by desktops, servers, and laptops. S3 DataSafe Online Backup is guarded by three-tiered encryption, including 256-bit AES encryption. Additionally, S3 DataSafe Online Backup offers military-grade 1,024-bit AES encryption protocol once the files arrive at the redundant remote data centers.

■ StoredIQ eDiscovery

StoredIQ has expanded its eDiscovery line to include StoredIQ Solution for Legacy Archived Media. The new product includes support for data stored on backup tapes and other types of legacy archived media and uses eMag Solutions' technology. StoredIQ says that with this expansion, it has its first eDiscovery solution that focuses on and captures data from all online and offline sources. StoredIQ's appliance automates eDiscovery processes that are legal and provides visibility and control over data that may be unstructured and unmanaged. The release gives companies in-house deployment to search, preserve, collect, and process data from numerous live-data sources across an enterprise, as well as remote locations. StoredIQ offers support for file and email servers, collaborative software programs, document-management repositories, and personal desktops. Additionally, companies can now extract and produce data from various tape and legacy archive formats.

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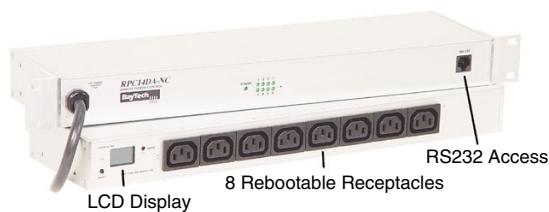
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PHYSICAL INFRASTRUCTURE



RPC 14

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- Current, Voltage, Power, and Temp Monitoring
- LCD Screen displays power monitoring information
- RS232 interface, 120/208VAC 10,20,30A Models
- Turn On, Off, or Reboot any or All Receptacles

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Right Innovation, Right Time

Book Helps You Master The Gartner Hype Cycle

by Kurt Marko

THE FORMAL STUDY of innovation as an economic and sociological force began in the early 20th century, with Joseph Schumpeter's theory of Creative Destruction often credited with being the first to describe this process as applied to capitalistic business cycles and long-term economic growth.

The application of academic rigor to innovation theory has spiked in the past decade, but the seminal moment igniting the boom was the 1997 publication of "The Innovator's Dilemma" by Harvard economist Clayton Christensen. This work introduced the concept of a disruptive technology in which a new, seemingly inferior technology can disrupt a market by undercutting existing products on cost and more rapidly evolving on a price-performance curve such that it gradually displaces traditional market leaders.

While Christensen's book focused on how enterprises can apply disruptive principles in the development of their own products, many have recognized that in our highly integrated global economy, companies

increasingly adopt externally developed innovations that others have turned into products or services. The trick here is finding those most relevant to a company's needs and creatively using them to solve business problems.

"Mastering the Hype Cycle," by Gartner analysts Jackie Fenn and Mark Raskino, offers a model for how innovations mature, how user perceptions about them change over time, and how enterprises can apply the model to ensure they adopt innovations at a point that maximizes reward vs. risk.

Major Themes

"Mastering the Hype Cycle" is divided into two parts: The book's first four chapters outline the theory of the hype cycle, or as the authors put it, "what it is, how it works, why it works that way, traps and opportunities it presents, and lessons to be learned." The following six chapters outline a formal process for systematically discovering, filtering, ranking,

evaluating, and implementing innovations within an enterprise.

The hype cycle, depicted as an overlay of two quasi-bell curves of differing slopes and peaks (see cover image), charts the hope or expectations for an innovation over time and consists of several phases.

An innovation starts with some trigger such as a technological breakthrough or product introduction that generates media buzz and user interest. While the innovation is still immature, it escalates through a period of hype about its utility and implications, eventually reaching the peak of inflated expectations. Over time, it becomes clear the innovation is far from attaining the dreams of its developers and users, thus precipitating a cascade of negative hype culminating in the trough of disillusionment. At this point, the innovation drops off the radar of most users and analysts, yet some believers continue development, and it gradually improves. As people begin to recognize the

innovation's newfound usefulness, it ascends the slope of enlightenment, eventually reaching a state of mainstream adoption and the plateau of productivity.

The authors cite many examples of products or concepts that have traversed this cycle. However, they augment the anecdotal evidence with concepts from psychology and sociology to interpret the model as a

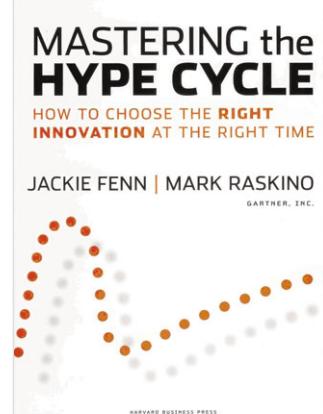
manifestation of human emotions (the madness of crowds), imagination, and subsequent rational reassessment.

Creative & Persuasive Theory

"Mastering the Hype Cycle" offers a creative and persuasive theory on how innovations mature over time—particularly the first part of the book, with its engaging explication of the concept. The second part of the book reads more like a software or business process manual and is likely of interest only to practitioners who have formal responsibility for managing the introduction of innovations into an organization. 

KEY CONCEPTS

- ▶ Innovations, which can be anything from new products or technologies to business processes or services, follow a repeatable, predictable path of visibility and expectation over time.
- ▶ The hype cycle model can be used as a predictive management tool to track and evaluate innovations in virtually any discipline.
- ▶ Organizations need to assess their risk tolerance to determine where on the hype cycle to adopt an innovation.
- ▶ The goal of selective adoption is avoidance of four hype cycle traps: adopting too early, giving up too soon, adopting too late, or hanging on too long.
- ▶ The STREET process is a set of activities, tools, and best practices for managing the innovation adoption process. The process stages are scope, track, rank, evaluate, evangelize, and transfer.



Mastering the Hype Cycle: How to Choose the Right Innovation at the Right Time

Authors: Jackie Fenn and Mark Raskino

Publisher: Harvard Business School Press

Price: \$29.95

Format: Hardcover, 256 pages

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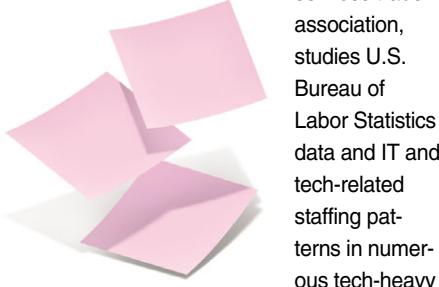
Other features of the DS19000 v.2 VTLs include data replication at a single node or across an enterprise and certification with leading backup applications and tape libraries. Plus, the VTLs can be customized for individual applications.

The DS19000 v.2 VTL family is the third generation of virtual tape solutions by DS1 and continues the company's goal of offering innovative and competitive storage solutions for data backup and recovery.

IT Dodges Pink Slips, For Now

Yahoo's doing it. AMD, Dell, eBay, HP, Motorola, Nokia, Nvidia, Palm, Texas Instruments, and Xerox are, too. Even the mighty Google is getting in on the latest wave of layoffs.

While there may be plenty of pink slips at many major technology companies, according to the NACCB (National Association of Computer Consultant Businesses), it's not all doom and gloom for IT employment. The NACCB, an IT services trade association, studies U.S. Bureau of Labor Statistics data and IT and tech-related staffing patterns in numerous tech-heavy



industries to produce its IT Employment Index, a monthly report on the status of the IT job market. The latest In-dex for October shows that IT jobs are faring considerably better than the general employment market.

Mark Roberts, CEO of the NACCB, says, "So far, the IT sector seems to be outperforming the general employment market, which is in stark contrast to what happened in 2002 [and] 2003, where it greatly underperformed the general employment market." Roberts went on to say, "Some of the unpublished statistics from the Bureau of Labor Statistics on unemployment in IT skill sets still shows pretty low unemployment."

IT Employment Up

In its latest report, NACCB saw losses of just 3,000 IT jobs, or less than 1% of the 3,916,200 positions the NACCB tracks. Compared to last year, IT employment is still up 4.5%. While the October numbers look good, Roberts tempers the report with a dose of reality, saying, "I don't believe for a moment that the IT employment is immune to what is happening in the general economy. At this point, at least, we're doing better."

When final numbers are available, November may be a different story: "I think in November we will see some contraction." But Roberts says that the demand for the services of IT professionals is still relatively strong because IT plays a vital role in the day-to-day needs of most businesses. Roberts says that brand-new projects and expanding market initiatives are likely to see cuts before more integral IT positions, such as maintenance and security and those elements that relate closest to the core of the business. "So that's obviously the place to be."

by Andrew Leibman

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Looking Outside For IT Support

Managed Services Are Available In A Variety Of Categories

by Drew Robb

IT SEEMS YOU CAN'T win when it comes to IT support. Many SMEs (small and medium-sized enterprises) are doing an outstanding job in this department when you consider the number of staff and the budgets they typically have to deal with. Yet they are often compared to large enterprises, which sometimes can boast legions of IT staffers, a well-manned help desk, and an entire team devoted to rolling out hardware and software.

"A lot of the SMEs we talk to are dealing with customers and users who demand enterprise-level service levels," says Nathan McNeill, vice president of product strategy at Bomgar (www.bomgar.com). "This really strains the resources of a small support department."

One way to even the playing field—at least a little—is to call in outside help. There are many ways to implement managed services, from supplementing your own internal efforts with externally based monitoring services to 100% outsourced end-user support.

"Companies that turn to managed service providers gain a more predictable cost structure, their systems are more reliable, and they receive a higher level of service," says Dan Shapero, senior vice president of marketing at Kaseya (www.kaseya.com). "If an SME only seeks help after experiencing IT issues, this can hinder performance or negatively impact their bottom line."

High Cost Of Skilled IT Staff

Hiring a dedicated IT staffer to look after end-user support, for example, can be costly. Similarly, it hasn't ever been cheap to pay for premium support via the big server vendors. Fortunately, lower-priced SME services are now being offered by many well-known suppliers.

"There are several factors that contribute to making managed services a particularly good fit for SMEs," says Ryan Brock, vice president of channels at AMI-Partners (www.ami-partners.com). "They include lower capital outlays, predictable cash flow, shorter deployment windows, reduced need for in-house IT staff (which SMEs generally lack), and the benefit for support from an established vendor or channel partner."

These are often available on a monthly subscription basis with little or no upfront investment required. The price varies according to the service level selected. It is not uncommon to find quotes of less than \$10 per supported device per month.

Too Much Time Troubleshooting

Even in companies where IT is comfortably on top of things, a casual analysis often uncovers the fact that way too much time is being consumed in troubleshooting. That opens the door to yet another way of implementing managed services: Have IT do the routine work and hire a services outfit to keep an eye on your systems and alert you to anything in need of attention.

"There might be a company that has eight servers, 100 clients, and eight switches that wants to self-maintain its systems but is interested in an alerting service and a couple of the add-on services," says Marshall Hammond, small business services manager at Dell (www.dell.com). "This company will benefit from remote monitoring and automated alerts when a monitored component of their environment is not within specifications."

With the ability to monitor virtually everything on a computer with an IP address, therefore, managed services are gaining interest among more SMEs as a means of supplementing the efforts of on-the-ground IT employees.

Key Points

- SME-oriented services have significantly reduced the cost of outsourced end-user support.
- It may be more viable to pay outsiders to handle routine end-user support and maintenance and focus your IT resources on strategic issues such as new application implementation.
- Inexpensive remote monitoring services are available to keep an eye on routine matters.
- Good local resources can be cheaper but are sometimes hard to find.

Finding The Mother Lode

For some businesses, national and regional managed services can be too costly or too impersonal. The alternative can be to find a good and inexpensive local guy—and that can be difficult. The best ones are often too sought after to take on new clients, and then there are others who don't quite have the skills they advertised. So there is risk in going local, but sometimes you strike gold and find a one-man IT army who will bend over backward to service his SME customers.

The best approach is to ask your colleagues, neighboring businesses, friends, and associates who they know. Find out how they handle their IT needs, who they use, and how much it costs. The mother lode might be just around the corner. **P**

Top Problem: Dealing With Rapid Growth

One reason to consider supplemental end-user support is as a method of addressing rapid expansion. Typically, a company boom ends up generating a whole lot of end-user-related traffic: Set up new desktops over here, debug this networking issue over there, resolve why certain users can't access the database, etc. This causes a tug-of-war on internal resources. IT is putting out all these fires, yet it is supposed to be implementing the new applications as part of overall

strategy. In some cases, it makes more sense to divest these functions from IT and hand them over to someone else.

"A company that is growing quickly and needs to focus their IT resources on more strategic projects can use remote monitoring and issue resolution, in addition to help desk support for their IT professionals and end users," says Marshall Hammond, small business services man-

ager at Dell (www.dell.com). "This can include vulnerability scanning, patch management, asset tracking, and quarterly planning and assessment."

Obviously, remote monitoring and resolution is far cheaper than onsite visits. But according to Hammond, more than 80% of problems can be fixed via phone or over an Internet connection. And depending on the level of service desired, a technician can be on your premises within hours.

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Gold-, and Energy Star 4.0-certified and offers the world's only green fingerprint keyboard, which is constructed of 35% post-consumer recycled material, as an optional purchase.

Productivity-wise, Lenovo offers Dash 1.1, a remote-managing utility that lets users boot, audit, and update the A62, as an optional purchase, while Express Repair provides versatility and convenience by fixing various system-corruption problems, many in less than three minutes and without adversely affecting the data stored on the A62, the OS, or software that's running. Lenovo's own built-in ThinkVantage Technologies include

various management and productivity utilities, such as a software image builder, one-button recovery, secure data deletion, and the ability to switch between wired and wireless connections and quickly deploy critical updates. Combined, the ThinkVantage Technologies take care of performance-related issues so IT staffs can concentrate on more pressing organizational issues.

The A62 ships with a built-in GbE port, 1GB of PC2-5300 RAM, ATI Radeon TM 3100 graphics, 160GB of 7,200rpm SATA II storage, and a DVD-ROM drive. Windows Vista Home Premium is included with other editions offered as options.

Are You Addicted To Mobile Email?

Survey Reveals Increasing Use Regardless Of The Situation

by Sandra Kay Miller

THEY'VE BEEN TAGGED "CrackBerrys" for a reason. Mobile communication is rapidly becoming a new addiction for the ever-connected generation. While in most instances, feverishly thumbing a mobile device at inappropriate moments results mainly in poor taste, there are other times when it can be downright dangerous.

Osterman Research (www.ostermanresearch.com) performs a large mobile messaging study each year to find out how mobile devices are being used throughout midsized to large organizations in North America. The 2008 survey yielded some interesting figures on what lengths users will go to for accessing mobile email.

According to Michael Osterman, president of Osterman Research, "It's constant for a lot of people. They get so attuned to the immediacy of getting the information. For older people, it used to be that postal mail was the formal way of communicating, and email was the quick-and-dirty way. Now, for a lot of young people, email is the formal way, and text messaging or mobile email is the dominant way. It's changed the perspective of what correspondence is all about."

Risky & Rude

"We wanted to find out how people used their mobile email and where do they use it in places where maybe they shouldn't because it has become such a part of the corporate culture," explains Osterman. "What we found was very interesting. We looked at the behavior in terms of where they use it, and we found that people use mobile email in some fairly dangerous

Email Anywhere, Anytime

Osterman Research discovered that people will access their email using a mobile device regardless of where they are or what they are doing.

- 77% while actively driving
- 41% on a commercial flight while in the air
- 16% during a funeral or memorial service

ways. For example, a lot of people admitted to using it while driving."

"I've seen people checking their email while skiing. When I ski, I need to absolutely concentrate on getting down the hill. No way could I read an email halfway down," says Andrew Barnes, senior vice president of corporate development at Neverfail (www.neverfailgroup.com), a vendor specializing in continuity of services, such as email.

"The most disturbing fact that came out of the survey, in my view, was the number of people who admitted to checking their email aloft in the air on a commercial plane. When the airline warns me that I should turn my mobile devices off before departure, I religiously follow that because I don't want to take any risk. It's disturbing that people will actually get out their BlackBerry and check their email at 30,000 feet," Barnes adds.

Barnes also chalked up this kind of behavior to pressure instead of addiction. "If you're on a red-eye from San Francisco to Boston and expected to do some final preparation for a meeting that you are going to straight off the plane, yet email

How Often Do You Check Your Email?

According to Osterman Research, 47% of mobile device users check their email more than 10 times per day while at work. 10% check mobile email more than 40 times each day when at work. After work, 37% of mobile users check their mobile email more than 10 times each day. Over the weekend, 47% check their mobile email more than 10 times per day.

use their mobile devices in the air. Commercial carriers don't want passengers using their own mobile phones. They want them to use the ones installed in the planes."

IT Responsibility

Mobile messaging has become such an important part of corporate culture that many people are finding it impossible to unplug from their mobile devices. "This really underscores the importance of making sure that mobile email is always available," says Osterman.

This puts pressure on IT departments to ensure continuous uptime. In order to

"The most disturbing fact that came out of the survey, in my view, was the number of people who admitted to checking their email aloft in the air on a commercial plane."

- Neverfail's Andrew Barnes

was down for half a day before you got on the plane, then I could see why someone who needs to close a deal may feel it's OK to do it just this time."

However, Osterman has yet to view any studies that are conclusive to the dangers of using Wi-Fi or Bluetooth devices on a commercial flight, despite warnings to turn off mobile devices or anything that can transmit or receive a signal. Mark Toigo, owner of Toigo Orchards and an avid pilot who has flown all over the world, debunked the idea of threats from mobile devices during flight. "It's a fallacy that mobile devices interfere with anything on airplanes. Lots of private pilots

achieve 24/7/365 uptime, organizations are installing some sort of redundancy within their mobile email systems, such as products that provide a hot backup server or a hosted service with a guaranteed SLA (service-level agreement).

"What we've found is lots of people check their work email from home on both workdays after hours and on weekends. It's not that IT has to maintain things during business hours anymore. It may be 11 o'clock on a Saturday night or 2 o'clock on a Sunday afternoon—everything always has to be up and running," says Osterman. Furthermore, he believes

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Many DNS Servers Still Vulnerable To Kaminsky Flaw

The Kaminsky flaw, which was publicly announced by Dan Kaminsky earlier this year, has not been patched in 25% of DNS servers, according to a survey done in a joint effort by Infoblox and The Measurement Factory. The findings (released Nov. 10) are based on a worldwide survey of domain name servers on the Internet.

The flaw is a vulnerability affecting DNS servers that allows cyber criminals to stage DNS cache poisoning attacks. In the event of a DNS cache poisoning attack, cyber criminals could send users to malicious sites or break into email accounts.

Cricket Liu, vice president of infrastructure at Infoblox (www.infoblox.com), cites a lack of understanding surrounding the consequences of not deploying the Kaminsky flaw patch as one reason so many DNS servers are left unprotected. Liu also says that some IT personnel do not believe that they are vulnerable.

"A lot of people that manage DNS infrastructure don't necessarily understand it as well as they should," he says. "They are uncomfortable making major wholesale changes like upgrading to a new version of their domain server because they are not sure of what the effect will be."

The report by Infoblox and The Measurement Factory found that one in four DNS servers have not deployed the patch for the Kaminsky flaw, which is a greater number than Liu says he expected to find. Additionally, the survey found that more than 40% of DNS servers still allow recursive queries, which can open the servers up to cache poisoning and DDoS attacks. DoS attacks can also get through to 30% of DNS servers because zone transfers to arbitrary requesters is allowed.

Liu says that in order for DNS servers to truly be protected, organizations need to address the concerns found in this survey and, most importantly, upgrade their DNS servers.

"Certainly one of the things that [organizations] need to do is patch your name servers, or you need to move to another name server platform that doesn't have the vulnerability," Liu says. "There's really no way around that."

by Tessa Breneman

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Getting Vendors To Deliver

What Are Your Options If They Don't Fulfill Their End Of The Deal?

by Carmi Levy

• • •

WHETHER YOU'RE buying a single piece of hardware, contracting temporary resources for a project, or outsourcing your entire operations team, ensuring you get what you paid for is critical to the initiative's success. You need to set expectations with your vendor—and track everyone's performance—to ensure that what's ultimately delivered closely matches what was initially promised. Anything less, and you're throwing money away.

Nemertes Research Principal Research Analyst John Burke says vendor alignment doesn't happen by accident, and it has to start early.

"You have to know what you want so you can craft your agreement or contract accordingly," he says. "If you don't know what you want, it's impossible to negotiate a proper agreement that's going to be meaningful. You also won't be able to get a commitment from the vendor that they will be able to deliver what you need."

Details, Details, Details

Jack Santos, CIO executive strategist with Burton Group, says getting to this point requires a great deal of precision.

"If you aren't as specific as you can get, right down to the details of what you expect, you're starting right off on the wrong foot," he says. "It's a bad scene from the very beginning."

Once the contract is signed and the work has begun, IT becomes accountable for monitoring compliance.

"Choose someone who knows the terms of the agreement to watch the meters, as it were, to determine whether what was promised is actually being delivered," says Burke. "For example, if the vendor is supposed to respond to phone calls in a

certain amount of time and you track that by having access to the ticketing system, this person will need to monitor the call logs to determine if that's actually happening."

It's All About Risk

How a vendor relationship is managed often depends on the kind of work being outsourced and the level of risk associated with it. Paul Roehrig, principal analyst of IT sourcing and vendor management with Forrester Research, outlines the two extremes:

Low risk. A basic outtasking or outsourcing situation where managers on both sides simply need to follow the terms of the contract to virtually guarantee a successful outcome. "It's like taming lions," says Roehrig. "Follow the rules, and you'll be OK."

High risk. A more involved outsourcing deal that might involve joint go-to-market accountabilities. "This is more like conducting an orchestra," says Roehrig. "The contract—or the piece of music—is a good foundation, but everyone brings something different to the table, and it's up to the conductor to harness the creative energy, including mistakes, nuances, and changes."

When Things Go Bad

Burke says some drift is almost inevitable. In many cases, it may not make sense to burn resources trying to nail down every last aspect of a particular agreement.

"The question is: Does it continue, or does it correct itself? Things that don't correct themselves need to be corrected," says Burke. "And it's the job of the person who's watching to raise the red flag."

Forrester's Roehrig says when people stop talking to each other, you know you've got a problem.

"When you start to see an us vs. them mentality, you know things are heading down a slippery slope," says Roehrig. "Another warning sign is when the contract is pulled out and used more as a bludgeon instead of something that's actually managed."

Burton Group's Santos says most vendors want to know when they're not making the grade.

"In my experience, if you identify the issues and the need to make corrections early enough in the process, they've always been more than happy to work with you to resolve them," he says. "The best vendors see things as more than just a single product or contract. They see the bigger picture and will sometimes take a loss on a particular deal in order to make things right."

Indeed, clients that view the vendor relationship as a long-term, symbiotic partnership stand a better chance of obtaining greater value over time than organizations strictly focused on squeezing the lowest possible price out of a vendor, adds Santos.

Relationship Repairs Not For The Faint Of Heart

Fixing what's broken and realigning expectations to reality often demand a strong stomach, says Santos.

"Where I've seen people fail is when they avoid asking the hard questions," he

Think Like A Project Manager

To keep vendor relationships strong and out-sourced work on target, consider the three levers of project management:

- Scope
- Schedule
- Budget

Use one or all of them to correct situations that aren't evolving according to plan. It's a rule that applies to insourced, as well as vendor-specific, workflow.

says. "They may be more focused on doing checkpoints and getting out of the room and waiting for the meeting next week. They assume they can catch it later."

In many cases, adds Santos, they won't catch it during next week's meeting. Consequently, a small issue will balloon into a larger one.

"Ask the questions you need to ask as soon as you need to ask them," he says. "You want to make sure that what you expect to happen is actually happening so you don't have any surprises down the road."

Getting optimal value from investments in vendor relationships has always been an important goal for IT managers in small and midsized organizations. Today's challenging economic landscape has raised the urgency even higher. Burke says companies can't afford to let this slide.

"They're already spending the money," he says, "so they should be devoting a little bit of somebody's time to see that they're getting what they're paying for." □

Can You Fix It If It's Broken?

Derailed vendor relationships don't all have to head for divorce court. Paul Roehrig, principal analyst for IT sourcing and vendor management with Forrester Research, says companies should stick to the following three-step process if things start to slip.

1. Recognize that you have an issue. "You can't solve the problem until you admit you have one," says Roehrig.

2. Get everyone around the table. This may not be the easiest course of action, but it's an absolutely critical step to ensure nothing is missed.

3. Create a tangible set of actions to resolve the disconnect. The resulting tactical activities give everyone opportunity to buy into the improvement effort. Roehrig says resolution efforts will fail unless everyone—client as well as vendor—buys in equally to the process.

Are You Addicted To Mobile Email?

Continued from Page 23

that mobile email is arguably more important than office email because people who

tend to use it are often the higher-profile people in the company—the senior executives, the sales force, someone sitting in

front of a client. "If you're an IT person, the last thing you want is a call from the CEO telling you that their mobile email is down."

"There are all sorts of places that people read their email, but ultimately it's about personal discipline and policies that should be put in place by the organization," says Osterman, who also believes

that organizations have a responsibility to not put people in the situation where they might feel tempted to use their devices when they really shouldn't.

Despite the findings that people will use their mobile devices just about anywhere, regardless of the risk or situation, Barnes surmised, "It's about fundamental consideration for people around you." □

MESSAGING & TELEPHONY

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Plan Your Equipment Placement

Putting Together The Data Center Equipment Puzzle

by Bruce Gain

• • •

DECIDING WHERE AND HOW to place data center equipment is one of the most daunting tasks an admin will face. But with such a challenge comes a great opportunity to create a super-efficient configuration without necessarily spending the extra money for the priciest equipment.

Specifically, better airflow, less electrical interference, and more efficient power management are some of the benefits well-thought-out equipment placement can offer. The improvements ultimately translate into lower costs by reducing energy consumption and limiting server downtime due to equipment failures.

Getting Started

Before you even think about placing equipment in a data center, you need to

have a comprehensive plan in place that includes assessing the equipment required and determining how you are going to position the equipment to best handle the tasks.

"IT managers need a clear understanding of what equipment they are installing and attributes of that equipment," says Michael Petrino, vice president of PTS Data Center Solutions (www.ptdcs.com).

Questions that need to be answered when getting started include how much power the equipment will consume, what type of power or power plugs are needed, the direction of airflow to cool equipment, network connectivity, and what servers and devices need to be grouped together, Petrino says.

Also consider where and how staffers will access and work in the data center, says Adam Waxman, vice president of client services at ROBOBak (www.robobak.com).

"Like any project planning exercise, the key is to understand not just the technical aspects of data center equipment placement but to take into account the ergonomic issues associated with people being able to access the equipment," Waxman says. "This includes making sure that all existing equipment is taken into account, as well as an expansion plan."

Finally, successful equipment placement also involves making sure that the requisite power is in place. "An independent power audit should be requested from your utility so that you can ensure that you have the extra capacity," Waxman says.

Investing In The Right Tools

Tried-and-tested software exists that can help you through the equipment placement process. Software tools vary in sophistication depending on what stage you use them during the process.

"Typically, we see most clients at least starting with spreadsheets. From there, the information usually migrates to some form of a flat visual program that offers a combination of a physical representation of the devices along with a device description in a coordinated rack position offering a scaled view of the device relative to the rack," Petrino says. "[On] the next level are software programs that are focused on rack representations that will offer the ability to have a 3D view of the cabinet, provide asset management tracking, and show logical and power connections."

A lot can be said about getting outside assistance, as well; certain tasks are best done by third parties, such as relying on a certified electrician to run power cables and set up transformers. Still, the right knowledge can help you better manage third-party contractors who add equipment. For example, you can make sure cables and wires are positioned where you want them, while the electrician does the actual installation and checks that everything conforms to safety and other regulatory codes.

Relying on a qualified third party can be especially beneficial when getting started. "Most IT managers are not performing moves and migrations on a regular basis, so using a consultant can help avoid some major pitfalls," Petrino says. "This is not a

task to be done by your local office moving company when relocating." Instead of seeing them as an additional expense, focus on the cost savings third-party services can generate.

The Cool Factor

Keeping server components cool has always been a concern, but now heat problems are reaching critical mass for an increasing number of data centers. Today, servers can pack much more data per byte as redundancy is reduced by merging several servers into a single unit through virtualization, which means processors and other components run at higher loads. In parallel, more server capacity is required to accommodate ever-increasing data needs. The end result, of course, means that more heat is released, so getting the equipment placement equation right is absolutely crucial to prevent overheating and ultimately equipment and power failures.

Key Points

- Create a plan that details what you have, what potential roadblocks there are, and what you need to accomplish.
- Make use of software solutions and third-party services.
- Take cooling into consideration as you plan placement of equipment and cables.

Through proper planning and investing in the right tools, however, it is possible to place and implement your data center's equipment in such a way that you can accommodate more servers running at higher loads.

When planning your cooling, make sure you don't turn the data center into a refrigerator. A tendency many IT admins have is to lower the temperature of the entire data center to a certain threshold rather than positioning airflow so that only crucial server components that run hot are kept cool. Besides the tremendous waste involved, this overkill approach does not necessarily keep the CPU, chipset, and other server components at optimal temperatures as well as it should.

"You have to cool where you have to cool," says Julien Ardisson, CTO and CIO of STRATO (www.strato.com). "This means you cool where the heat is coming from in the servers. It's useless to cool the whole room." When it comes to positioning and configuring cooling systems, for example, the air must be channeled to cool only the components that generate heat by directing cool airflow only where it is necessary. □

TOP TIPS

• **Check what's inside the server box.** Cool airflow must first pass through the front of the server where the processor, chipset, memory, and hard drives are usually positioned on the motherboard. However, it turns out that about 10% of servers are not configured this way, and the crucial components are not, in fact, located in front of the server, according to statistics from PTS Data Center Solutions (www.ptdcs.com). Besides studying server diagrams, it is thus necessary to actually pop open the server lid and see inside to determine that the configuration is indeed a front-to-back configuration; otherwise, channeling cool air through the wrong side

could eventually result in overheating and equipment failure.

• **Get the cabling right.** Mix all of the cabling together and you get interference between the data and electrical wires; for starters, then, data and power cables should be run separately. A good idea is to run the larger data cables so that they are suspended above the server racks and position the smaller power cables below the floor, says Joe Skorupa, an analyst for Gartner. "You put data cables under the floor and they block the air, and then you get hot spots," Skorupa says. "Electrical cables are much smaller in

diameter and can thus run underneath the floor."

• **Keep the cooling units out of the sun.** The idea is to keep the actual cooling units as cool as possible so they don't have to work as hard, leading to better efficiency. Yet, for whatever reason, some data center managers install cooling systems on a roof exposed to direct sunlight, even in desert environments in the United States, says Julien Ardisson, CTO and CIO of STRATO (www.strato.com). "You don't want to put cooling units on the roof," Ardisson says. "The cooling system should be somewhere [with] average temperatures [of] 10 degrees Celsius."

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SIX QUICK TIPS

Analyzing Network Log Data

Planning Ahead Can Keep Log Analysis From Becoming Overwhelming

by Holly Dolezalek

• • •

NETWORK LOG DATA can be used to protect against hacker attacks, improve device performance, and achieve many other desirable outcomes. Here are some tips for you to keep in mind as you start analyzing your log data.

First Ask Why

You'd be surprised how many IT managers just start collecting and analyzing log data without asking why. Is it for compliance, troubleshooting, performance monitoring, or a response to an attack? Are you looking backward to find out how long a security breach has been going on? The reason for data collection makes a difference in what data you collect, how you collect it, and what you do with it.

"For example, a firewall can log every event where it's blocked something or when it's allowed something," says Anton Chuvakin, director of PCI compliance solutions at IT security company Qualys (www.qualys.com). "Most people would assume that what is denied is more

important, but depending on why you're analyzing your data, what is allowed might be more important, or both might be [equally important]."

There's a lot of homework to do before analyzing log data, and there's always a superabundance of data to analyze. Before you get started, ask yourself these questions: What are you looking for and why do you need it? Do you need data from routers, switches, firewalls, or network devices? Will you need system data or even application data? "The distinction between network log data and system log data is somewhat artificial, and you may need system data in order to gather the full picture on your network," Chuvakin says.

Analyze Bit By Bit

In most cases, log data comes in big, stressful bunches, and the sheer size of the data, measured often in terabytes, can be overwhelming. What do you look at first? The most important thing to remember is that not only can you not do it all at once, you shouldn't. "The phased approach is the best one," Chuvakin says. "That may sound

require. It's also helpful if you need a strong log management policy or possibly an update to the existing policy: A C-level sponsor can give you backup and clear direction when those issues arise.

Start with PCI compliance. The PCI DSS (Payment Card Industry Data Security Standard) is a good place to start when you're mapping out your network log data analysis strategy. It spells out a lot of different parameters, including how long to store data and other best practices. You can find more information about the standard at www.pcisecuritystandards.org.

BONUS TIPS

Assemble your virtual team. You'll need quite a few members on your log analysis team, including system, network, and security administrators. The auditing team might want to be involved, too, and Dave Shackleford, director of the center for policy and compliance at Configuresoft (www.configuresoft.com), points out that it's not a bad idea to also involve any application teams who might want to plug in to your efforts.

Senior sponsorship is also a good ingredient for many reasons, not least the cross-team cooperation that network log data analysis is going to

like a no-brainer, but if you're pulling compliance data together for Microsoft or Unix, it can get really huge and scary. The way to go is to start small and build up. Maybe start with a firewall [and] then move up to a Web server. By that time, you know how messy it can be, and you've hardened yourself and you're ready to dive in to something like an Oracle database."

While you're breaking it down, you might consider applying the piece-by-piece approach to storing your log data, as well. "I've seen clients and customers who have created batch jobs so that instead of logging in real time, they store the log data for a certain amount of time and then send it all at a certain time to keep networks from getting inundated," says Dave Shackleford, director of the center for policy and compliance at Configuresoft (www.configuresoft.com).

Consider The Human Factor

Like any IT project, people are going to factor into this job in a big way. You'll likely be working with many different teams company-wide to get the data you need, and that means deploying your people skills—and your patience. "Whoever manages the logging is not likely to own the system being logged," Chuvakin says. "The actual configuration of the devices is not that hard, but getting everyone to modify the system to log the necessary info is trickier."

You might need to modify a file on a server to get the correct data for your analysis or run a command, but if you don't have permission to do that, you might have to submit a form to a manager who then tells a system administrator to do it. What takes 10 minutes on your to-do list might actually take two weeks in real life, so take human complications into account as you're planning your attack.

Look Into Vendor Tools

Back in the day, an ambitious IT manager could save time and money by building the tools necessary to collect and analyze log data, but vendors have made big strides in functionality and affordability since the 1980s. Now, vendor tools for log data analysis are both useful and customizable, so that even a company with unusual architecture or other needs can benefit from buying rather than building.

"You used to have to write Perl scripts to parse the log entries, but there's been a lot of development in the log management industry, and there are parsing engines that take care of scripting the data and sorting it out," Shackleford says.

Buying has another advantage: Vendor tools are more likely to pass what Chuvakin terms as the bus test. "You waste a lot of time maintaining these homegrown

Best Return On Investment:

Store For Security

Equally as important as analyzing log data is where you store it. The preferred method is to gather the data locally from the different devices but to store it centrally elsewhere. "If you can avoid it, you don't want to store your log data locally," says Dave Shackleford, director of the center for policy and compliance at Configuresoft (www.configuresoft.com). "It's a performance issue, but it's also a security issue. Even if someone hacks into your router, they can't cover their tracks because the logs are going somewhere else."

Wherever you store it, you'll need to monitor it, and access should be limited by role. Not only is this sensitive data but it can also contain other data, such as users' passwords and even the content of their emails. "The audit team may need access to logs, but in read-only fashion so they can't modify the data," says Shackleford. "Managers should probably have read-only access, too, and that is true of anyone who might be in a position to screw things up."

Easiest To Implement:

Learn As You Go

Author Robert Cormier once said, "The beautiful part of writing is that you don't have to get it right the first time—unlike, say, brain surgery." The same is true of network log data analysis. "When you're configuring for log data analysis, just remember: Nobody gets it right the first time," says Shackleford. "People almost always log too much or not enough, and you need to accept that you'll have to do some tuning before you get it right."

Different devices come with different configurations and capture different information in different ways. For example, you'll have to synchronize the time across devices because you can't reconstruct an audit trail unless their times match up. And even once you've done that, not all of your devices are going to make other decisions the same way. "Devices often arbitrarily decide criticality," Shackleford says. "For one domain controller, a failed logon from a user is a critical event, where another might rank an event two levels lower in criticality." Don't feel bad if you don't get it all right from the get-go.

solutions, and what happens if you get hit by a bus?" he says. "If someone can't come along after you and figure out how to use it or alter it, it's not the best solution."



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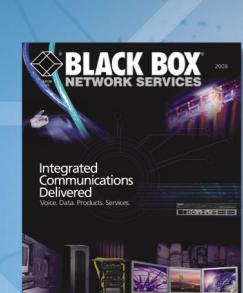
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WHAT'S HAPPENING

Are Biometrics In Your Data Center's Future?

Technology Firm Privaris Offers Extra Security With The Convenience Of A Smart Card

by Sue Hildreth

A POCKET-SIZED fingerprint reader may be the answer to the problem of how to make security access both highly reliable and very convenient. The wireless biometric reader is the brainchild of Privaris, a 12-person firm based in Charlottesville, Va. Called the plusID, the device scans the user's fingerprint, compares it to the fingerprint on file, and authorizes access by sending a wireless signal to a receiver.

Companies, as well as government agencies, are more worried about unauthorized users accessing data or facilities, such as computer rooms, R&D areas, or government buildings, says Privaris CEO John Petze. Most have already deployed smart card readers but have found that employees tend to lose and borrow the cards, making them ineffective as a means of authorization.

"Organizations of all sizes are having issues with security. They've been using access cards for data centers for years, but it's not good enough because they realize that the card can be shared or lost or stolen. It simply doesn't prove the identity of the person who presented it to the reader at the door," he explains. "With the increased regulation and enhancements of security protocols, they have to improve their security."

One obvious way to do that is with biometrics. A user can't use stolen or borrowed plusID fobs, as the true user's fingerprint, as well as a password, is necessary to gain access to secured areas. The device holds a template of the authorized user's fingerprint, which it compares to a scan of an attempted user's fingerprint. Thus a user has to pass a three-factor identification test to gain authorization: what he has, what he knows, and who he is. That is one factor more than is used by traditional smart cards.

Varied Applications

According to Forrester Research, biometrics has finally reached mainstream status, driven by government regulations requiring tighter security for certain industries, such as healthcare, and various government security initiatives, such as the HSPD-12 requirement for government agencies to provide biometrically capable smart cards to federal employees and contractors. Corporations in a variety of industries have been investing in security to protect their data and physical plants from hackers, thieves, and even potential terrorists.

While Privaris (434/293-4033; www.privaris.com) gets many of its customers—which currently number 75—from the financial services and government industries, there

are plenty of other organizations that have highly sensitive intellectual property, customer data, or other assets they need to protect, says Petze.

For example, one customer works with precious metals in the semiconductor industry. "They obviously want to know who's going in and taking out metals," he notes. Some of the uses for a biometric smart card include parking garages, pharmaceutical companies, companies with stores of hazardous waste or other toxic chemicals, data archival facilities, data centers, air traffic control rooms, and armories, according to the Privaris Web site.

Recipe For Success

The company was founded in 2001 by a professor of computer engineering, and the company spent five years developing the concepts behind plusID. The first plusID product was unveiled in June 2006 and is marketed via a network of some 30 distributors and systems integrators. In addition to selling its plusID, Privaris also



makes its biometric technology available to OEM vendors.

One major factor in Privaris' expectations of success in selling biometrics to corporations is the partnership it has with Irvine, Calif.-based HID Global—a leading maker of RFID security technologies, including contactless smart cards. A licensing arrangement with HID Global gives Privaris the right to incorporate existing smart card reader technologies, thus making it compatible with 90% of existing card readers installed in corporate and public facilities. The plusID transmits the appropriate code to whichever reader it's communicating with and can be used for access control at different vendors' card readers within the same facility. That should save companies from having to rip out extensive

card access installations or issue multiple cards for different access points.

"With our system, you deposit a valid access card code onto the plusID and pay a fee to the [smart card] vendor that sells the access codes," says Petze. "Card-based access readers are ubiquitous now. Every medium to large business has them on their restricted areas. So the question becomes, 'How can you work with them to raise the level of security?' We take it up a level using biometric identity."

Up & Coming

The newest addition, the plusID 90, is useful for situations where vehicles need authorization to enter an area, such as a military base. It is capable of sending a signal up to 100 meters. It and the other versions also support 125KHz proximity technology, 13.56MHz RF for contactless smart cards, and USB technology.

Security-conscious IT professionals can expect to see more developments coming out of the company in the near future. Petze says the firm has a number of patents pending and two that were recently granted. One of those, says Petze, involves fingerprints being read by an LCD.

"We're not planning to put an LCD screen on our device, but we do expect to license intellectual property to others out there," he explains. "We're a technology company that helps others develop biometric identity solutions."

Privaris is also working on support for the government's HSPD-12 card standard and expects to unveil products that support HSPD-12 in 2009. And soon, the company will announce support for the RSA standard for one-time password generation.

"RSA one-time password capability will be embedded into our devices. So our tokens will have all of your HID card formats and one-time computer password support for logons," says Petze. "Our view is to create a biometric credential that works with all existing credentials. It'll get you into the door, into the gate, and logs you on to the computer." ▀

THREE QUESTIONS

Arch Convergence Switches Handle Core Converged Traffic

Avaya Cajun Line Lives On As Acadia Family

by Daniel P. Dern

AS THE ACTIVITY IN THE CENTER—"core"—of your company's network ramps up, you may need more bandwidth, or, according to Scott Hopkinson, founder and president of network switch vendor Arch Convergence, what you may need is the infrastructure that lets you use the bandwidth you've got more efficiently but also grow modularly when you do need or want more.

Arch Convergence (978/263-1974; www.archconvergence.com) was founded in 2005 by the team behind the Cajun family of platforms at Avaya. "Arch Convergence was basically a management buyout of the Cajun P580/P882 product line," says Hopkinson.

■ What are the biggest IT-related issues facing today's small to midsized enterprise?

"No. 1 is network stability—your network has to run without fail because most of your employees and your company's ability to run depend on it," states Hopkinson.

Second, he says, is the ability of a company's network to handle converged applications, such as converged communications—

voice, data, and video—and other convergences, such as the LAN "core" (the backbone and other central parts of the network infrastructure) also carrying storage traffic. "Technologies like Fibre Channel over Ethernet (FCoE) are bringing storage traffic onto the LAN core," says Hopkinson.

And third, he says, is the need to manage and maintain the company network, including adjusting for new applications and capabilities. "As users look to add network applications, such as VoIP, video remote learning, and videoconferencing, the network has to be able to support them. These applications don't necessarily need a lot of bandwidth, but the network has to be able to prioritize traffic [and] support these applications with low jitter and quality of service."

The common thread to all these, says Hopkinson, is being able to do more with less, including reducing both budget and head count. "Most companies don't need 10Gb connections in most of their network," he says. "The key is to be able to manage and provision so that the important traffic gets through, and networks run with as little manual administration as possible."

■ What should Processor readers know about your company's products?

According to Hopkinson, "Our Acadia family of products are enterprise-class network routers/switches intended for use as the network core. They're suitable for 100 or more endpoints, up to several thousand. We have hardware-based QoS to enable converged networks. We support ATM and Ethernet." The Acadia switches have competed successfully for LAN Emulation ATM solutions, he adds.

Arch Convergence's switches are proven field-hardened devices, Hopkinson emphasizes. "There are customers who have been using them for extended periods of time . . . and we have customers who run our switches for over a year without needing to reboot them."

■ What makes your company unique?

Arch Convergence is the only source for new hardware for Acadia systems or for Cajun systems that had come from Avaya, Hopkinson points out.

"We acquired inventory, raw materials, and all the manufacturing tooling for platform. For companies that already have Acadia switches or had bought Cajun devices from Avaya, Arch Convergence can upgrade and provide additional equipment," he says. "We also provide support and maintenance. This allows the useful life span to be extended by years."

"And we have significant inventory to lease." Because of this, says Hopkinson, the company has more options in how to make its switches available. "We have an attractive ownership model, including lease or lease-to-own at a fraction of purchase cost, and an internal lease program, with no outside finance involved."

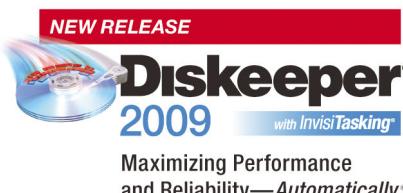


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1 CPU, Intel Quad Core Xeon 5310, 1.6GHz 8MB 1GB (2X512MB) 667MHz FBDIMM Installed, 8TB (16X 500GB) SATA II Installed, Max - 16TB. 1X 16 Port SATA II RAID Controller Installed. 3U Rackmount Chassis, 800Watt Redundant PS. 16 Drive bay, Rails Included. Price Starting at: \$4995/-

**5U Server - ASA5241i**

1 CPU, Intel Quad Core Xeon 5310, 1.6GHz 8MB 1GB (2X512MB) 667MHz FBDIMM Installed, 12TB (24X 500GB) SATA II Installed, Max - 24TB. 1X 24 Port SATA II RAID Controller Installed. 5U Rackmount Chassis, 930Watt Redundant PS. 24 Drive bay, Rails Included. Price Starting at: \$7345/-

**8U Server - ASA8421i**

1 CPU, Intel Quad Core Xeon 5310, 1.6GHz 8MB 1GB (2X512MB) 667MHz FBDIMM Installed, 2X 80GB SATA II 7200 RPM OS drives Installed 20TB (40X 500GB) SATA II Installed, Max - 40TB. 2X 12 Port & 1X 16 Port RAID Controller Installed. 8U Rackmount Chassis, 1300Watt Redundant PS. 42 Drive bay, Rails Included. Price Starting at: \$12735/-

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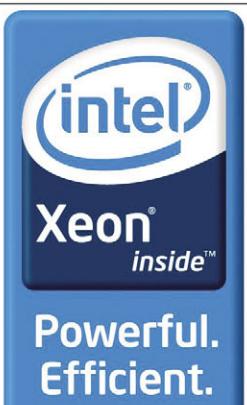


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